

## D1.1 Q4I Research Report

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## 1. Introduction

Research was done to identify and analyse models of institutional development support in schools that have proven to be successful in instilling innovation in the school through quality development. The analysis covers 10 European countries: Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Portugal, Romania, UK. The report proposes a scope and research approach and questions to be addressed.

Research was divided among the partners according to geographic areas (taking into account language skills and local knowledge). Research focused on:

- The situation of schools regarding the "4 engines of change" (see the "Relevance" paragraphs of the proposal) in schools: mapping quantitative and qualitative data.
- Policies: identifying policies (local, regional, national, supranational) targeting the "4 engines" in EU Schools.
- Past and current initiatives and projects in EU Schools: mapping initiatives and projects targeting or including aspects considered innovative. Especially EU co-funded projects under the LLP Programme will be researched. Sources from other international actors like OECD, UN, Council of Europe will be taken into account.

## 2. Structure of National reports

The national report should have the following elements:

### 1. National context

- Population, economic and social characteristics
- Description of the types of education and training (formal and informal) that occur in a country
- Practices and organisations (universities, institutions providing teacher training, teachers' unions) dealing with key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills, education policies and teacher training

### 2. Policy environment

- Main features of the local, regional and national policy documents and strategies concerning education policies on key competencies in LLL
- Main features of the local, regional and national policy documents and strategies concerning education policies on ICT in the learning process
- Main features of the local, regional and national policy documents and strategies concerning education policies on creativity and innovation
- Main features of the local, regional and national policy documents and strategies concerning education policies on intercultural learning skills
- What level and kind of investment is currently being deployed into key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills?
- What strategic objectives are attributed to key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills?
- How is key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills linked to other policy agendas

### 3. Past and current initiatives and projects in Schools

Each case should provide information on: Title of the initiatives and projects, Types of the initiatives and projects, Objectives of initiatives and projects, General assessment of initiatives and projects.

## 3. Finland

### 3.1 National context

#### Population, economic and social characteristics

Finland, a democratic welfare state and the northernmost member of the European Union is an example of a nation that has been able to transform its traditional economy into a modern knowledge economy within relatively short period of time. Education has played important role in this process. This chapter argues that system-wide excellence in student learning is attainable at reasonable cost, using education policies differing from conventional market-oriented reform strategies prevalent in many other countries. Unlike many other education systems, test-based accountability and externally determined learning standards have not been part of Finnish education policies. Relying on data from international student assessments, indicators and earlier policy studies, this chapter describes how steady improvement in student learning has been attained through Finnish education policies based on equity, flexibility, creativity, teacher professionalism, and mutual trust. The conclusion is that educational reform in Finland has been built upon ideas of good leadership that place an emphasis on teaching and learning, encouraging schools to craft optimal learning environments and implement educational content that best helps their students reach the general goals of schooling, and professional leadership of schools.

Finland went through a fundamental economic and cultural transformation during the last three decades of the 20th century. For the sake of curiosity, in 1950, according to Routti and Ylä-Anttila (2006), the Finnish economic structure corresponded quite closely to that of Sweden in 1910. Since the 1950s industrial and economic development in Finland was based on an investment-driven economy in which the main elements of economic production were machinery, engineering, and forestry-based industries. The late 1980s marked the beginning of the specialization of production, trade and research and development in the Finnish economy. The emerging knowledge-based economy coincided with the opening of the economy and deregulation of capital flows. Routti and Ylä-Anttila (2006) describe this transformation by saying that there are few, if any, other examples of natural resource-abundant countries that have managed to transform their industrial structures toward higher knowledge intensity and value added so rapidly and successfully as Finland.

Transition to the knowledge-based economy has significantly increased domestic knowledge generation. In the late 1970s Finland ranked at the lower end of the OECD (Organisation for Economic Co-operation and Development) countries in research and development intensity. According to the OECD, Finland invests 3.5 percent of GDP in research and development (R&D) which is the second highest in OECD after Sweden (OECD, 2008; Routti & Ylä-Anttila, 2006). Interestingly, during the biggest economic recession of peacetime in the early 1990s R&D investments were kept in agreed levels and private investment even increased (Castells &

Himanen, 2002). It is noteworthy that the building of an equity-based and well-performing Finnish education system has occurred with relatively modest education spending. Moreover, the education system is primarily financed from public sources. In 2006, some two percent of total education expenditure came from private sources, while 99 percent of primary and secondary education expenditure was publicly financed (OECD, 2008). Indeed, total expenditure on educational institutions as a percentage of GDP for all levels of education declined from 7.9 percent in 1992 to 6.3 percent in 1995 and most recently to 6.0 percent in 2002 (Hirvi, 1996). This indicates that high participation rates and equity coupled with good learning achievement have been established without increasing educational spending, quite the contrary. Since the economic crisis of 1990s, local education authorities have increasingly struggled with shrinking budgets, leading to enlarged class sizes, reducing some school-support services, and, in many cases, also merging and closing of schools to gain efficiency (Rinne, Kivirauma & Simola, 2002). The number of comprehensive schools (grades 1 to 9) has declined by 20 percent over the last ten years. Nevertheless, basic conditions for good secondary level schooling for all have been made available throughout the country. I argue that securing necessary resources for and investments in initial preparation of teachers in the universities has contributed positively later on to teaching force that has not only been adoptive to necessary school improvement but also capable to look for scientifically-based solutions to common problems in their schools.

In the 1980s the Finnish education system had only a few features that attracted any interest among international educators and many aspects of education were adopted from its wealthier western neighbor, Sweden. Indeed, Finland's education system was recognized internationally exceptional on only one account: However, the Finnish 10-year-olds were among the best readers in the world (Allerup & Mejdning, 2003; Elley, 1992). Other than that, international education indicators left Finland in the shadows of traditional education superpowers, such as Sweden, England, USA, and Germany. This chapter shows how Finland has been able to upgrade its human capital by transforming its education system from less-than-average to one of the best international performers since the 1980s. It also discusses how that success has been achieved by implementing education reforms that differ from those in many other nations. Finally, it suggests some education reform principles that may have been significant drivers of today's good educational performance.

As Finland attracts global attention due to its high-performing education system, it is worth asking whether there was any progress in this performance since the 1980s. If progress can be reliably identified, then, consequently, the question becomes what factors might be behind successful education reform? In my recent analysis of educational reform policies in Finland (Sahlberg, 2007), I describe how Finland changed its traditional education system, with little to celebrate in terms of international comparisons, into a model of a modern, publicly financed education system with widespread equity, good quality, large participation – all of this at reasonable cost (OECD, 2008; Sahlberg, 2007; Schleicher, 2006). What is significant from this analysis is the steady progress during the past three decades within four main domains: (1) increased level of educational attainment of the adult population,

(2) widespread equity in terms of learning outcomes and performance of schools, (3) a good level of student learning as measured by international student assessments, and (4) moderate overall spending and efficiency, almost solely from public sources.

### **Description of the types of education and training (formal and informal) that occur in a country**

A central objective of Finnish education policy is to provide all citizens with equal opportunities to receive education irrespective of age, domicile, sex, mother tongue and economic situation. The right to free basic education for all residents of Finland – and not just for Finnish citizens – is guaranteed by statutes. In addition, everyone has the right to post-basic education and the Finnish education system gives everyone access to upper secondary education or higher education. General education alone is not regarded as being sufficient. The concept of lifelong learning reflects the whole national education system, because it covers peoples' lives from early childhood to old age. Lifelong learning takes place both in official learning environments, such as schools, and also less officially through the Internet and as on-the-job learning.

The education system promotes implementation of the principles of lifelong learning by giving young people a high level of education and, at the same time, the ability to participate in continuing education later in life. Additionally, the education system in Finland supports the education needs of adults so they may participate easily in versatile continuing education, which will be useful in their working lives. A short overview of the Finnish Educational system will provide the basic insights that will be required to also understand the qualities of the Finnish Learning-to-Learn context that are addresses in the later parts of this Finnish national report.

#### *Pre-school education in Finland*

Before compulsory education, children have a subjective right to pre-primary education at the age of six. Participation in pre-primary education is voluntary and is provided for 6-year-olds at day-care centres and in pre-primary classes operating in conjunction with comprehensive schools. In 2007, almost all 6-year-olds participated in pre-primary education.

#### *Basic / Compulsory education in Finland*

Compulsory education begins at the age of seven. After nine years in basic education, it is possible to continue either to general upper secondary education or to vocational upper secondary education and training, and then to a polytechnic or university. Basic education means general education provided for each age group as a whole. It is intended for children aged between seven and sixteen and completion of its syllabus at comprehensive school takes nine years. Once they have completed basic education, pupils have fulfilled their compulsory education.

#### *Upper secondary education in Finland*



Upper secondary education includes general upper secondary education and upper secondary vocational education and training. General upper secondary education is non-vocational education preparing for the matriculation examination. The main objective of upper secondary vocational education and training, in turn, is to provide vocational competence. In 2007, approximately 92% of comprehensive school leavers moved on to general or vocational upper secondary studies immediately after basic education. In 2007, 86% of the 25–34 age group had attained at least upper secondary education. Higher education is made available by universities and polytechnics. Both sectors have their own profiles; universities focus on scientific research and instruction, whereas polytechnics are professionally oriented higher education institutions adopting a more practical approach.

### *Upper secondary Vocational Education & Training in Finland*

The quantitative regulation system of Finnish vocational education and training was reformed in the late 1990's. The new legislation is more flexible, emphasizing education providers' own responsibility and enabling them to decide on the means used to achieve the objectives of education and training independently, within the limits of the relevant legislation and the authorisation to provide education and training. In 2008, there were 169 providers of upper secondary VET in Finland. The authorization to provide upper secondary VET specifies the framework for the provider's education and training activities. The authorisations include regulations on the types and scopes of education and training that providers may organize with financing for the education and culture sector. Within the framework of its authorisation, each provider decides on the configuration, names and educational missions of their educational institutions and on the forms of provision. The authorisations specify aspects such as fields and levels of education and, in certain cases, qualifications and annual student numbers.

Education providers may independently transfer intake quotas from one institution and field to another on a yearly basis within the limits of the maximum annual student numbers authorised. Provision of some qualifications has been restricted due to modest educational needs or high costs of provision, etc. Examples of such qualifications include upper secondary vocational qualifications in the field of Culture and qualifications for forest machine operators within the field of Natural Resources. A specific educational mission may also include obligations, such as an obligation to offer certain types of education and training or to maintain certain services.

### *Higher education institutions in Finland*

The Finnish higher education system consists of two complementary sectors, namely, universities and polytechnics (universities of applied sciences), which have different roles and profiles. The model is based on the differentiated degrees, contents and missions of the two sectors. The network of higher education institutions operating within the Ministry of Education sector consists of 20 universities and 26 polytechnics.



One of the key objectives of the Government's higher education reform is to achieve a network of higher education institutions that is stronger and more effective in regional terms. This entails a reduction in the number of higher education institutions and their units. The role of polytechnic education and research, development and innovation activities will become more pronounced in areas without an independent university in particular.

By nature, polytechnics are mostly multidisciplinary and regional higher education institutions with operational focus on links with the world of work and regional development. Their degrees are higher education degrees with a professional emphasis. The statutory mission of polytechnics is to provide higher education for professional expert assignments based on the requirements of the world of work and its development as well as on research and artistic premises. According to Government policy decisions, polytechnics focus on high-quality education relevant to the world of work and on applied research and development specifically geared towards supporting small and medium-sized business activities and the service sector. Polytechnics are also responsible for responding to regional demand for labour. All Finnish universities are state-owned and they operate under the auspices of the Ministry of Education within central government. The Ministry is responsible for preparing matters concerning universities and appropriate operations and steering of universities. A new Universities Act is due to come into force on 1st January 2010. The purpose of the university reform and the new Universities Act is to increase universities' autonomy, establish them as independent legal entities and create better operating conditions for them in international terms. The reform would change the status of universities from state accounting offices to independent public corporations or foundations governed by the Foundations Act.

The new Universities Act would include provisions on the universities' mission, administration, operational funding and steering, as well as on aspects relating to university research and education, students and staff. The key objectives of the university reform and structural development include improving the quality of education, developing study processes and raising the international standard of research. As a result of the university reform, universities' increasing powers and accountability create incentives and conditions to organize university operations more efficiently and appropriately. The operations of universities, including private institutions, will mostly be financed from government funds and the universities will also continue to discharge the public mission assigned to them by central government. The key components of the system employed by the Ministry of Education to steer higher education institutions are funding, legislation and information-based guidance. The main steering instruments include agreements between the Ministry and higher education institutions, the feedback procedure and monitoring systems. Regular negotiations between the Ministry of Education and higher education institutions play a key role in the steering process. In these negotiations, the parties – i.e. the universities and the Ministry of Education within the university sector and the polytechnics, their maintaining organisations and the Ministry within the polytechnic sector – agree on the individual institutions' mission, profile and priority fields as well as on key objectives and development measures in

terms of national higher education policy to be set for their operations for a specified number of years at a time. The outline of the agreements for the 2010–2012 period consists of the common objectives of the higher education system, the missions, profiles and priority fields of individual higher education institutions, their quantitative targets, such as degree targets, as well as significant development measures and funding criteria. Starting from 2013, agreements will be negotiated for four years at a time.

## Practices and organisations

Practices and organisations (universities, institutions providing teacher training, teachers' unions) dealing with key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills, education policies and teacher training.

The Finnish Government decides every four years on the development plan for education and university research. The current plan covers the years 1999–2004 and, in it, the concept of lifelong learning is declared to be one of the main principles underlying the development of Finnish education. This prospect will mean that education is identified less with formal institutional activity and is seen increasingly as a process covering all ages, forms of learning, and learning environments. The contribution of lifelong learning to the enrichment of life in a more personal, less career-oriented sense is no less important. The development plan for 1999–2004 was approved by the government in December 1999. Its specific aims reflect the above-mentioned challenges and are geared to improving the following in terms of lifelong learning: the basic educational level of young people in the transition from school to working life; the basic educational level of the middle-aged; learning ability at all ages; learning opportunities available to senior citizens; formal recognition of skills and knowledge obtained outside education institutions; educational information and counselling; the criteria for funding education institutions; and the enhancement of teaching skills. The plan includes a special section on lifelong learning and, in addition, the principle of lifelong learning is a basis for several actions.

The content of the principle of lifelong learning has been defined in the plan as follows: high standard of education, learning skills, and ensuring an adequate amount of chances and implementation methods of the continuous learning of the adult population. This definition is regarded as the central educational goal for the entire population. The development of learning skills will be emphasised as one of the most important goals in all educational sectors. The new plan also encourages the appreciation and promotion of learning outside educational institutions. Experiences with the previous development plan for education and university research prove that most objectives stated in it will be realised in one form or another.

In order to achieve the lifelong learning goals in practical terms, it is necessary to obtain adequate and comprehensive info about all possibilities of studying and financing of studies.

Another important government plan which takes the principle of lifelong learning into account, is the national strategy for education, training and research in the information society. The strategy was first completed in 1995 and it outlined the information and communication policy for education, training and research well into the 21st century. The strategy contained the opinions and proposals of an expert committee set up by the Ministry of Education on how the level of education and research can be raised by applying information technology, thus promoting national competitiveness and employment, and how to promote the availability and use of information and to assess the needs and identify the means for giving citizens basic skills in using information and communication technologies (ICTs).

The aims of the strategy were implemented through the information society programme (1995-99) of the Ministry of Education. Almost FIM 1 billion (EUR 167 million) of earmarked budget funding was used to this end. A renewed national strategy for education, training and research in the information society for the years 2000–04 was launched by the Ministry of Education in December 1999. The strategy states that, by the year 2004, Finland will be one of the leading knowledge and interactive societies. Success will be based on citizens' equal opportunities to study and develop their own knowledge and extensively utilise information resources and educational services. A high-quality, ethically and economically sustainable mode of operation in network-based teaching and research will be established. New demands for knowledge require the rapid and extensive application of the principle of lifelong learning to the entire educational system in order to motivate and teach the population to manage, analyse, evaluate and refine the increasing flow of information and thus utilise the opportunities offered by technology. The growing competence requirements of the information society will be met by systematically developing the prerequisites of lifelong learning.

On the initiative of the government, the Ministry of Education introduced a national strategy for lifelong learning ('the joy of learning', 1997). In it, the concept of lifelong learning covers not only individuals but the communities where they live and work as well as the underlying societal parameters that determine their operational environment. This kind of approach is necessary to facilitate a broadly based and continuous process of learning.

### **Formal, non-formal and informal teacher training in Finland**

The teaching profession is highly respected in Finland. Teaching qualifications are prescribed by law and vary for different kinds of teachers. These national requirements guarantee that the standard of teacher education remains high. All teaching has both educational and didactic objectives, although the age of pupils and the size of classes vary greatly. Nowadays a teacher's work has changed from dispensing knowledge to guiding learning. In addition to doing the teaching, teachers have to plan it and interact with colleagues, pupils and their parents, and many different contact groups. OAJ, the Trade Union of Education in Finland, is involved in promoting teacher education by influencing decisions concerning educational policy and the development of the educational and pedagogical system. The association for

students in teacher education, SOOL, the Student Teachers' Union of Finland, is part of the OAJ organization. Highly educated teachers are the guarantors of the quality of teaching. The majority of teacher education students study at universities. In Finland subject specialist teachers have traditionally been educated at universities and they generally teach in secondary schools. The education of primary school teachers was transferred to the universities in the early 1970s, and that of kindergarten teachers in the mid-1990s. All polytechnic and university teachers receive their basic and further education at universities.

### *Teacher training within Universities in Finland*

The law on the university degree system contains a separate section on teacher education. Other laws determine what teacher education programmes individual universities are entitled to provide. Teacher education is given either in faculties/departments of education or in subject faculties such as humanities, science, or theology. First, students take a Bachelor's degree, which comprises 180 ECTS credits, and after that a 120-credit Master's degree. They take basic, intermediate and advanced studies (120 cr) in their major subject, and basic and intermediate studies (60 cr) in their minor subject. The complete 300-credit degree takes about five years. Students aiming at a career as a kindergarten teacher or a teacher of adult evening classes complete a three-year Bachelor's degree. Although this is sufficient qualification for these posts, many teachers carry on to do a Master's degree. Under certain conditions, a polytechnic degree is sufficient qualification for kindergarten teachers or teachers of adult evening classes. The degree programmes include a 60-credit professional competence element, which varies according to the type of teaching posts the students are aiming at. Depending on the teaching field, they may concentrate on early childhood and pre-school teaching, the core subjects taken by all primary school pupils (so-called multi-field studies), special education, or student counselling. Teacher education also includes pedagogical studies, which incorporate teaching practice, as well as, for subject specialists, study of the subject to be taught. The teaching practice included in the students' pedagogical studies may take place either in the training schools of the faculties/departments of education or in other approved schools. Kindergarten teacher trainees normally practise in day care centres. Teachers with a Master's degree have the option of continuing their studies at the doctoral level. Teacher education in the polytechnics

### *Teacher education within Polytechnics in Finland*

Some polytechnics have a vocational teacher education unit. Vocational teacher education and training consists of pedagogical studies. Students in these vocational institutes of higher education may, after their pedagogical studies, take a course of study for special needs teachers or study counsellors. Both are worth 60 credits.

### *Early-childhood education and pre-school teaching in Finland*

Kindergarten teachers

Kindergarten teachers work with children between the ages of one and six. Students complete the degree of Bachelor of Education specialising in early childhood education. The studies provide the professional proficiency required for early childhood and pre-school teaching. It is also possible to qualify as a kindergarten teacher by completing the Bachelor of Social Services degree, which must include studies focusing on early childhood education and social pedagogy worth 60 credits. University educated kindergarten teachers may specialise in special education by completing a study programme aimed at special needs teaching.

#### Pre-school teachers

Kindergarten teachers who have undertaken university level kindergarten teacher education may work as pre-school teachers in day care or schools. Pre-school teaching, which precedes compulsory schooling, is provided for six-year-olds. The majority of the teachers are kindergarten teachers, but qualified primary school teachers are also involved at this level. The Bachelor of Social Services degree does not qualify graduates to work at pre-school level. Special education teachers also feature in preschool teaching. Most of them are qualified special needs kindergarten teachers who have also completed a special education study programme. Primary school teachers with special training in this field may also be involved.

#### *Compulsory and Further education teachers in Finland*

##### Primary school teachers

Primary school teachers teach children in years 1–6 of compulsory schooling. At lower levels they have their own class or group, for which they may provide the teaching in all subjects on the curriculum. In order to qualify they take a Master's degree (majoring in education sciences) at the teacher education unit of the faculty/department of education. The degree comprises the pedagogical study programme for teachers, together with all the subjects covered in years 1–6 and cross-curricular themes. It may also include basic and intermediate studies of a subject on the comprehensive school curriculum, which serves as qualification to teach that subject to pupils in years 7–9. Primary school teachers who complete a study programme for special education teachers are entitled to teach groups of pupils transferred to special needs teaching.

##### Secondary school teachers

Subject specialists are qualified to teach years 7–9 in compulsory schooling and in upper secondary schools and, depending on their education, also in vocational schools and adult education. There are two ways of becoming a secondary school teacher. The majority of students completes an MA in their chosen subject and applies separately for teacher education, while some choose to apply directly for teacher education when applying to study their subject. This direct selection procedure is the more recommendable alternative in terms of teacher identity development, as the students know when applying for the right to study that they are



heading for the teaching profession. In the faculties, students often focus on two subjects they intend to teach, completing advanced studies in a major subject and basic and intermediate studies in a minor subject. Those studying to become teachers of the mother tongue and literature in most cases concentrate solely on these subjects. Unlike other secondary school teachers, teachers of home economics and crafts study at the faculty/ department of education, majoring in education, home economics or crafts. It is possible to complete the pedagogical education as a post-graduate.

#### Special education teachers/ special education primary school teachers

Most teachers in special education work in years 1–9 and, alongside the regular teaching, give extensive special education to pupils in need of it. They work either separately from or in the same room with the primary or secondary school teachers. Special needs primary school teachers teach small groups of learners transferred to special education. Special education teachers need a Master's degree, majoring in special education, at a faculty/ department of education. Their education includes studies giving them the professional competence needed to be a special needs teacher, and the pedagogical study programme. Those aiming to become special education primary school teachers also take a course in the subjects taught in primary school. They often do their studies in special education after having completed their degree in primary teaching. It is also possible to have any Master's degree and then qualify as a special education teacher after completing the required study programme in special education. Teachers working with retarded pupils need an appropriate university or polytechnic degree, complemented with studies conferring professional competence for the tasks of a special education teacher.

#### Guidance counselors

The term student counsellor is used in compulsory schooling (years 1–9), and guidance counsellor in upper secondary schools, vocational schools and polytechnics. They assist pupils and students with their course planning, applications for further studies, study techniques and entering the labour market. The qualifications include a Master of Arts (Education) degree as well as pedagogical studies. Guidance counsellors may also qualify by completing any Master's degree and the guidance counsellor study programme.

#### *Vocational education and training teachers in Finland*

##### Teachers of vocational subjects

Teachers of vocational subjects have a suitable Master's degree (university or polytechnic), or another appropriate degree, determined by the education provider. The educational qualifications required vary in different fields of vocational training. Teachers in business and administration as well as the social services and health care sectors must always have a university Master's degree. Teachers of vocational subjects must have at least three years' work experience in a field compatible with

the teaching post before they begin their pedagogical studies, which they complete either before they take up teaching or as a distance learning programme while teaching.

#### Core subject teachers

Core subjects in vocational education include Finnish or Swedish, foreign languages, mathematics and natural sciences. Core subject teacher trainees require a Master's degree, having undertaken basic, intermediate and advanced studies in one subject and basic and intermediate studies in the other subjects to be taught. The pedagogical studies are undertaken either at a university or at a vocational teacher education department.

#### Special education teachers

Core subject and other teachers at the vocational level completing a 60-credit study programme for teachers in special education qualify as special education teachers.

#### Guidance counselors

Core subject and vocational teachers completing a 60-credit study programme for polytechnic teachers qualify as guidance counsellors in vocational training, compulsory education, or upper secondary schools.

### 3.2 Policy environment

Taking a lifelong learning perspective of the education, training and learning that are available and facilitated within the Finnish national context is important both for understanding the learn-to-learn orientation/focus that are characteristic for Finland as well as for getting a better understanding of the educational achievements made in Finland, such as the PISA results and developments in the area of learning-to-learn competencies.

The starting point for such insight generation will be firstly initiated with an overview of the Finnish education system, followed with a more in-depth explanation of some of the educational services (such as pre-school education/care) and different form of learning opportunities for professionals (such as the informal education/learning services).

Finland's objectives for lifelong learning are set in the development plan for education and research 2007–2012 adopted by the Government in 2007 and in the strategic policy lines set out in the Government Programme. The whole education system, including vocational education and training and self-motivated adult education, belongs to the Ministry of Education sector. The Ministry of Employment and the Economy is responsible for labour market training. The Government prepares for the whole electoral period a Government programme that deals with the development of education issues also for the parts beyond the Ministry of Education's sector. In



addition the Government adopts a development plan for the whole education system every four years. It has not been seen necessary to devise a separate lifelong learning strategy. According to the development plan, special priorities between 2007 and 2012 will be to effect equal access to education and training, to assure a high quality of education and training and the availability of competent work force, to develop higher education institutions and to invest in teachers' competencies. The aims of the development programme support the implementation of the Government's policy programmes for the well-being of children, youth and families, for health promotion and for employment, entrepreneurship and working life; and the Child and Youth Policy Programme.

### Development of Key competencies in Finland

Key competencies for lifelong learning are included in the national core curricula governing basic and upper secondary education. Lifelong learning is defined as a point of view guiding education policy and other policies relating to learning. The aim is to guarantee basic educational rights for every pupil and student according to their abilities and special needs.

During the last government term, the Ministry of Education was carrying out a "better basic education programme" (known as the POP programme), thereby allocating resources to quality enhancement. The priorities in POP are to reduce the size of teaching groups, to increase guidance counselling, to develop teaching and guidance of pupils with special educational needs, to promote school club activities and home-school cooperation, and to diversify the selection of foreign languages. The focus in the development of special-needs teaching is on teaching methods, on unified administrative practices at the local level, and on closer cooperation between different school districts. Intensified guidance counselling would be given at transition points in young people's educational pathways, with special emphasis on careers counselling. In 2009 quality criteria would be devised for basic education with a view to quality enhancement. These support the implementation of statutes governing basic education, quality enhancement in teaching and the improvement of pupils' learning capacity.

The Ministry of Education did also set up a committee to prepare proposals for the development of general upper secondary education, which was submitted in October 2010.

The aim is to assure the supply and accessibility of upper secondary education and to develop financing and support services, and to promote the internationalisation of education.

### Existing teacher competence & L2L frameworks in Finland

The national objectives for basic and upper secondary education are set in a Government Decree. They emphasise all the eight key competencies. The basic education (2004) and upper secondary core curriculum (2003) determine how these

objectives are translated into practice in school. The core curricula also set out the aims and core content of subjects and cross-curricular themes. The key competencies have been taken into account in the aims and content of both subjects and cross-curricular themes, which in basic education are growth as a person, cultural identity and internationalisation, media skills and communications, participatory citizenship and entrepreneurship, responsibility for the environment, well-being and a sustainable future, safety and traffic, and technology and the individual; and in general upper secondary education: active citizenship and entrepreneurship, well-being and safety, sustainable development, cultural identity and knowledge of cultures, technology and society, and media skills and communication.

These themes are addressed both in connection with subjects and in other school activities, such as study visits, excursions and school camps, school fetes and other joint events, pupil/student association activities and school clubs.

In basic and upper secondary education, the key competencies relating to Communication in the mother tongue, Communication in foreign languages and Mathematical competence and basic competence in science are included in the aims and content of mother tongue and literature, foreign languages, and mathematics, environmental and natural science, biology, geography, physics, chemistry, respectively.

Key competencies relating to technology are included in mathematics, natural sciences and, in basic education, in crafts (technical and textile work) and home economics. Social and civic competencies are primarily included in history, social science and health education and, in basic education, home economics. Cultural awareness and expression is particularly included in mother tongue and literature, art, music, sports, crafts and home economics. Digital competence, learning to learn, sense of initiative and entrepreneurship belong to the aims of all subjects and cross-curricular themes. Learning-to-learn is understood in Finland to be a readiness formed through good educational practices and accompanying all achievement. Learning-to-learn as an indicator in assessment is meant to provide essential information for teachers, administration, and decision makers responsible for the developing of education. Developing tools for the assessment of learning-to-learn was understood to be a very demanding process.

In 1995, the National Board of Education, responsible for developing methods used in assessment and evaluation, started co-operation with the University of Helsinki. Since that, a research group lead by professor Jarkko Hautamäki has been carrying out a project “Oppimaan oppimisen arviointi” (Assessing learning to learn) under the support of the National Board of Education. Learning-to-learn has been understood to be a key competence for lifelong learning. The results of these Finnish efforts have been used to further develop both the concept of learning-to-learn, as well as means and approaches to measure learning-to-learn, and this in international co-operation with teachers, researchers and other partners responsible for developing

learning-to-learn quality of education. (adapted from introduction by Ritva Jakku-Sihvonen, in “Assessing Learningto Learn”)

Due to the rapid changes in the working environment and in the nature of work, and because of knowledge becoming obsolete quickly, the cornerstone for success is continuous learning. The modern understanding of learning and the development of skills supports the notion that learning-to-learn skills play a central role in the development of the individual.

The evaluation of the learning-to-learn skills should be future-oriented. Education should prepare students for lifelong learning, and the students’ skills should be evaluated on the basis of their personal needs and goals. The evaluation of learning-to-learn skills directs attention especially to the core competencies, or the meta-cognitive abilities. These abilities cannot be achieved through any particular school subject or course as such.

Learning-to-learn skills are important at all levels of the education system. These skills show as an ability to acquire, process and adapt new information. The motivation to study, self-reliance and the self-image of the student as a learner are of great importance. In addition the student needs the capability for independent and self-initiated learning and problem-solving, as well as the ability to evaluate his or her own learning strategies. At all the levels of the education system the self-image of the student, the motivation to study, information processing skills and self-initiative are emphasised. (A Framework for evaluating educational outcomes in Finland, 1999).

Learning-to-learn refers to the adaptation to change and unanticipated tasks in maintaining the cognitive and affective self-regulation in and of learning action as reflecting on the reason and moral capacity and activating the commitment to thinking and the perspective of hope in the life processes (Hautamäki et.al., 2001).

The learning-to-learn assessment is an attempt to respond to the new needs of educational evaluation and to complement the more traditional subject based assessment. The framework needs to analyse the different factors that are a product of or affected by the educational process and can be seen to be imbedded in the daily work at school as common factors crossing and permeating the different school subjects guiding the student’s performance in them. These factors, i.e. learning-to-learn competencies, get reflected in the results students reach in different subjects in school. The factors that lie behind the performance of students, comprise of two theoretically independent but functionally closely interacting areas: cognitive competencies and cognitive and affective beliefs.

The learning-to-learn skills and abilities, generally competencies, form a general ability complex, which is formed through the learning and application of specific strategies. One major component is how to describe and analyse the competencies in relation to new situations and tasks. The rationale for the learning-to-learn concept is to assess how new tasks are being solved with the skills, abilities, beliefs and motivations people acquire at school, e.g. what their capacity to transfer skills and

abilities to fit the new situation are. School goals are linked to learning tasks given by the teacher and which the student is expected to accept as his or her own. In this process the outer social context is replaced by the inner context of the self. In school students are given tasks that they are invited to accept as their own with all the motivational, goal related, and ability conditions attached to them.

The processes of learning-to-learn are set in motion in this acceptance of the given task. The acceptance of the task activates the processes that either enhance or hinder intellectual work. Theoretically the link of the concept of learning-to-learn and the will can be built through the construct of the relatively autonomous fields of personal control.

The concept learning orientation is used as a central term for controlling conceptions. The concept of learning function is used to make distinctions between knowledge, skill, hope and exploration. Knowledge refers to the knowing of facts. Skills refer to knowing how. But the knowing of facts or how to proceed does not lead to the undertaking of a problem. What is needed is a willingness to explore, to assess the situation, to set goals and to act. But what is needed in addition to this is the component of hope, i.e. the willingness and readiness to direct oneself towards the task, to form goals, to get motivated, to have the courage to face challenges and possible defeat.

Learning-to-learn consist of learning competencies, self-related beliefs and content related beliefs. The learning competencies are divided into four divisions: learning domain, reasoning domain, management domain and affective self-regulation.

The self-related beliefs include learning motivation, academic selves at school, task acceptance, self-evaluation and future orientation. Context related beliefs deal with the supporting and mediating social contexts, and the perceptions of the dominant values and interpretations for different phenomena.

Methods of implementation of its LLL/L2L aims in Finland  
The officially defined aims of lifelong learning can be divided into ten themes groups. The themes are presented below, followed by a brief evaluation of how the aims have been attained.

- Taking into account all age groups

Educational differences between different age groups are relatively high in Finland. The educational level of young people, in particular, is good. About 83% of 30 to 34 year-olds have at least upper secondary education (80% of men and 86% of women), while about 40% of the baby boom generation (50 to 54 year-olds) have no vocational training. Women are more highly educated than men in all age groups. Young people are thus well taken care of, but there is still much work to be done to raise the educational level of older age groups. Older age groups actively participate in adult education schemes, but the problem is that training activity seems to accumulate: the most active adult students are those who already have a good basic

education. Those with a less satisfactory basic education are not so keen to take part in adult education. Senior citizens are also at risk of being excluded from lifelong learning, although their activity in the sphere of adult education is clearly growing.

- Formal recognition of skills and knowledge obtained outside educational institutions

In addition to formal adult education, opportunities for the recognition of non-formal learning on the basis of competence-based qualifications have emerged. The non-formal nature of competence-based qualifications is obscured by the fact that the competence-based qualification is only obtained after a formal training period in most cases. Furthermore, skills and knowledge obtained in leisure-time activities or at home are not usually accredited in the sphere of formal education. The vocational education of young people has traditionally been school-based. However, extended on-the-job training periods have brought greater non-formality to vocational education.

- Enlargement of learning environments

Development of opportunities for distance-learning and virtual environments has been emphasised in the Finnish educational system. The main aim has been to improve the learning opportunities of adults and to safeguard regional equality in terms of learning opportunities. Distance-learning has been developed particularly within adult education (distance general upper secondary schools). In vocational education, distance learning is being developed in the form of net pedagogy and virtual schools. Those involved in vocational education can also benefit from courses at distance general upper secondary schools. Generally, the significance of new learning environments has increased and they are an essential part of educational development. However, it is too early to evaluate the importance of the new learning environments in the sphere of education.

- Development of guidance and counselling

According to curricula, pupils and students should be sufficiently guided and counselled in terms of education at all educational levels. According to evaluation reports, this aim has been attained quite well. The problems lie in differences concerning the availability of counseling services at different educational institutions and the lack of time reserved for counselling. Additionally, counsellors working at comprehensive schools and upper secondary schools should be better informed about the opportunities offered by vocational education. In order to facilitate entry into working life and further education, recruitment and career services have been established at educational institutions. Due to insufficient resources, these services have not yet taken off satisfactorily. Guidance and counselling measures are supported by centralised, net-based student selection systems, which facilitate the collection of information on available educational schemes.

- On-the-job learning



On-the-job learning has become an important target for educational development. In the 1990s, the capability of the vocational education system to meet the needs of a changing workplace was brought into question in Finland. Among the problems encountered were the lack of correspondence between qualifications obtained through training and the expectations of the workplace, the lack of cooperation between education and the working life, the poor tradition of entrepreneurship, and the complication of the transition from education to the work. Indeed, in the 1990s, the Finnish educational system enhanced its on-the-job learning strategy, whose core manifestations are the development of a competence-based qualification system, reinforcement of the position of on-the-job learning periods in vocational education and the expansion of apprenticeship training. For example, the number of persons participating in apprenticeships multiplied in Finland during the 1990s, even though the percentage of apprenticeships among all persons participating in a vocational education is still quite low. The problem is also that much of the increase in apprenticeships is due to additional vocational training in the form of apprenticeships, where participants are usually adults, whereas the increase in initial apprenticeship training for young people has not been as strong. Another critical point is the readiness of small and medium-sized enterprises (SMEs) to participate in arranging on-the-job training. In general, Finland is in transition towards a less institute-based instruction. The role of educational institutions will, however, remain important.

- Financing systems were reorganized in order to promote results-oriented education

The Finnish educational system follows the Nordic welfare society model, where education is public and financed with public funds. According to OECD statistics, Finland is among the leading countries in terms of expenditure on education, although cuts in public spending in the 1990s meant that we fell a few positions in the ranking list. Upper secondary level educational institutions, polytechnics and universities compete for clients of further education and supplementary training. The client usually has to pay for further education, whether the client is a company, organisation or individual. There are several private institutions operating in the commercial training market. From an economic point of view, it is problematic that the public financial support allocated (by the State or, to some extent, by the municipalities) to further education and supplementary training on different grounds and in different amounts, distorts competition between education providers. The reform of the funding of further education aims to alleviate this problem. In general, the structural, institutional and financial basis of the Finnish education system and adult education is versatile and strong and provides a good foundation for lifelong learning.

- Improvement of teaching skills

The Opepro project, which charted the qualitative and quantitative needs of teachers in basic and further education, has been important in terms of the development of teachers' professional skills, particularly for teachers in vocational institutions, because they are facing new challenges: teachers are expected to be actively

involved in cooperation between education and working life. Companies' attitudes to initiatives and contacts made by school representatives are usually quite positive and companies value these contacts.

Teachers are also expected to contribute to planning on-the-job training periods, the institution's marketing efforts and the assessments of on-the-job training periods. These expectations are justified because, according to several studies, educational institutions and teachers often have inadequate knowledge about working life and businesses operating in the surrounding area (Luukkainen, 2000). The competence level of teachers in comprehensive and upper secondary schools is quite good, although about 1 500 teachers paid by the hour do not have the appropriate degree for their job (Luukkainen, 2000). Although the role of the teacher is increasingly becoming a role as a student counsellor or a planner of educational environments (so-called 'renewal of teaching profession'), there have been no dramatic changes in the role of the teacher so far. The role is changing, but the process takes time and requires support.

- Aiming at high-quality education

High-quality education is being pursued through national and international evaluations/development projects. A fairly comprehensive evaluation system has been developed in Finland.

- Development of learning skills

Learning skills are basic prerequisites for lifelong learning. The development of learning skills is a cornerstone for all curricula. However, according to different evaluations, there are significant regional, gender-related and school-related differences in learning skills.

- Ensuring flexibility and optionality

Flexible studying opportunities, accreditation of previous studies and the opportunity to select subjects according to personal interests increase the motivation for and the commitment to lifelong learning. Flexibility and options are applied at all grades. The size of educational institutions and regional differences set some limits to the variety of options, however.

- Responding to the challenges of the information society

The objective of the Finnish information society is that all citizens should have equal opportunities to obtain the skills they need in the information society. In general, the technical resources (network connections, etc.) are good at workplaces and schools. Lately, however, a fear has been voiced that some parts of the population (particularly those with a low education and from older age groups) will become the 'have-nots' in terms of IT services.



Competence-based learning services as part of Finnish Lifelong Learning

The Finnish system of competence-based examinations was implemented in the 1990s. The reasons behind developing this system included the need to raise the professional skills of the labour force and to bring education and working life closer together by including working life in the assessment of professional skills. The implementation of the system has resulted in vocational institutions changing their curricula to meet better the needs of working life. Today, vocational qualification guidelines are at a satisfactory level, but their complicated wording continues to be a problem. In addition, qualification guidelines do not always correspond to the rapidly changing knowledge and skills required in working life.

The competence-based examination system has proved that there are very few people in Finland able to take examinations without the qualifying training. According to statistics collected in 1999, just 434 of the 12 815 people who took the examination did it with work experience as their only background. On the other hand, information on the share of vocational competence acquired in training versus that acquired earlier in working life is not available for individual examinees. Additionally, institutions mainly concentrate on advertising available training, provision of information about opportunities to take examinations is exceptional, and students have also preferred to concentrate specifically on training. All in all, development of the competence-based examination system requires more responsibility from employers and closer cooperation between working life and institutions.

## 4. France

### 4.1 National context

#### Population, economic and social characteristics

Total surface area: 670,922 Km<sup>2</sup> (Metropolitan France: 547,030 Km<sup>2</sup>; overseas departments 123,892 Km<sup>2</sup>). Total population: estimated at 65.350 million in 2012 (Metropolitan France: 63.46 million; overseas departments: 1.89 million). These figures take into account the definitive results of the census fixing the legal population on 1st January 2006. The population increase is caused more by excess births over deaths than the migratory balance. The total fertility rate is the highest in Europe: 2.01 children per woman in 2011. The average age at labour is up and reached 30 in 2011. The unemployment rate (by the definition of the BIT) in the third quarter of 2012 in Metropolitan France was 9.9% (it was 9.1% in 2009), with 2.8 million of unemployed people. For the back-to-school period 2011, the school and higher education population (Metropolitan France and Overseas Departments, public + private) amounted to 15 150.6 millions pupils, students and apprentices broken down as follows (in thousands):

School and higher education population (in thousands)

Pre-primary education:	2 561.8
Primary education:	4 148.9
Lower Secondary education:	3 185.2
Upper secondary education:	2 384.1
Apprentices:	433.1
Higher education:	2 347.8

The French economy is mainly a service economy: the service sector occupies around 77% of the active population, the secondary sector (mainly industry), 21% and the primary sector (agriculture, fishing, etc.) 2%. It is an increasingly open economy, highly ranked in international trade (5th importer and 5th exporter in the world). According to the "Institut national de la statistique et des études économiques" (INSEE), in the fourth quarter 2012, GDP in volume rose at the rate of +0.2%

Description of the types of education and training (formal and informal) that occur in a country

At central level, the French education system is regulated by two departments: the Department for National Education – which oversees the school system – and the Department for Higher Education and Research – which is responsible for higher education and research. They govern within the framework defined by the

Parliament, which states the fundamental principles of education (law no. 89-486 of 10 July 1989, the law no. 2005-380 of 23 April 2005 and the law no 2013-595 of 8 July 2013). The State plays a major role in governance, as, by long tradition, the French education system is centralised. Nevertheless, at local level, and since the start of a process of decentralisation of competences in the administration of the educational system in the 1980s, local authorities have been playing an increasingly significant part in governance, ensuring the material operation of the system (construction and maintenance of school buildings, school transport, supply of educational materials, etc.).

Education is compulsory between the ages of 6 and 16 years. However, France has a long tradition of pre-primary education: for the past twenty years, almost all children attend nursery school from the age of three, even though it is optional; it is therefore an integral part of the French education system and falls under the responsibility of the Department for National Education which sets the curricula.

Higher education is characterised by the coexistence of two systems: universities, – public institutions that have an open admissions policy, except for instituts universitaires de technologie (IUT - technological university institutes) or classes préparatoires intégrées (integrated preparatory classes) – and a non-university sector, including, in particular, Grandes Ecoles (Elite Schools), with a highly selective admissions policy open to baccalauréat holders having attended two years of classes préparatoires, themselves highly selective on entry and during the course.

The French education system is organised into several levels of education:

- Pre-primary education (ISCED 0)\*, which is dispensed at “nursery schools” and take children from 2/3 up to 6 years of age. Almost all children attend nursery school from the age of three, even though it is optional. Such schools therefore form – together with the elementary level - an integral part of the French “primary level of education”, which is under the aegis of the Department for National Education.
- Primary education (ISCED 1), which is provided in “elementary schools” and admits children between the ages of 6 and 11. It marks the start of compulsory schooling, and is secular and free of charge when dispensed in State schools. At the end of this 5-year-course, pupils automatically access to the secondary level of education (there is neither standardised tests nor guidance procedures).
- Lower secondary education (ISCED 2), which is provided in collèges for 4 school years (pupils between the ages of 11 and 15 years). Education in collèges is compulsory and common to all pupils. A national diploma (the brevet) is awarded at the end of collège schooling. Admission to upper secondary level is not conditional upon success in the brevet. At the end of collège schooling (15 year-old pupils), the school recommends the appropriate scholastic path to families, basing its recommendation on the pupil’s school reports and particular interests. Children will continue their schooling either in

general, technological or professional education, provided at upper secondary level.

- Upper secondary education (ISCED 3), which is dispensed in “general and technological lycées” or in “professional lycées”, which extends over 3 years (pupils between the ages of 15 and 18 years). Upper secondary education provides three educational paths: general path (which prepares pupils for long-term higher studies), technological path (which mainly prepares pupils for higher technological studies) and professional path (which leads mainly to active working life, but also enables students to continue their studies in higher education). A national diploma is awarded at the end of secondary schooling: the baccalauréat. It which is both a sign of successful completion of secondary studies and the first step in university education, access to higher studies being conditional upon its obtention. Pupils at professional lycées can prepare the CAP (Certificat d’aptitude professionnelle), a course of study extending over 2 years, after what they can either integrate active working life or prepare the professional baccalauréat after 2 additional years of studies.
- Higher education (ISCED 5 and ISCED 6), which is dispensed in higher educational institutions. These institutions have a wide variety of legal statuses that are listed in the French Code of Education (book VII). Courses dispensed at these institutions have different aims and conditions for admission, but most of them are structured into three study cycles (Bachelor’s degree, Master’s degree and Doctorate) and in ECTS credits, in compliance with the principles of the Bologna Process.

In 2013, the French education system provided schooling for around 12 million pupils, students and apprentices (representing about 20% of the national population); the total budget was of 45.5 billion euros, in 2012 (the equivalent of 6% of the Gross Domestic Product).(MEN-DEPP)

## Practices and organisations

### First Cycle Programmes

First, bachelor programmes are presented through the main branches of study, their normal structure and length and the various stages or levels into which programmes may be divided with reference to National Qualifications Frameworks. Are also detailed admission requirements (general and alternative routes), curriculum, teaching methods, progression of students, graduate employability, student assessment and certification. Second, short-cycle higher education is described when applicable along the same lines: branches of study, admission requirements (general and alternative routes), curriculum, teaching methods, progression of students, graduate employability, student assessment and certification. Third, any organisational variation such as for example, distance learning, open universities, etc. are explained through their general objectives, their admissions criteria, programme of activities and methodological emphasis. All information on recognition and validation of foreign degrees or other qualifications are described in the chapter on the Mobility and International Dimension in Education.

## Second Cycle Programmes (Master Programmes)

Those programmes are presented through the main branches of study, their normal structure and length. Are also detailed admission requirements (general and alternative routes), curriculum, teaching methods, progression of students, graduate employability, student assessment and certification.

## Programmes outside the Bachelor and Master Structure

This section describes variations in degree programmes (for example, degree programmes where the length is unusually long, and/or programmes that begin with a first cycle entry but end in a second cycle degree etc.). As for the other programmes, the general objectives of these alternative structures are explained as well as the branches of study where they are to be found, their admissions criteria and any other differences that exist in comparison to the typical bachelor and master programmes.

## Third Cycle (PhD) Programmes

The organisation of doctoral studies is presented through the main branches of study at this level of education by grouping them into categories, such as humanities and arts, science, mathematics and computing, health and welfare, social sciences, business and law, etc. as well as the normal length of each branch in years and the various stages into which it may be divided. This extends to a description of the organisation of structured doctoral studies in doctoral schools or graduate schools and any specific distinction in the structure of doctoral education (for example, "professional doctorates").

Are also detailed admission requirements (general and alternative routes), status of doctoral students/candidates, supervision arrangements, graduate employability, assessment, certification and any organisational variation.

## 4.2 Policy environment

Main features of the local, regional and national policy documents and strategies concerning education policies on key competencies in LLL, on ICT in the learning process, on creativity and innovation, on intercultural learning skills. The French education system is characterised by strong State presence in the organisation and funding of Education. The State defines the details of curricula at all education levels; it organises the teachers' admissions procedure, defines content, recruits teachers who become civil servants, provides them with in-service training; it recruits and trains inspectors, responsible for controlling the quality of the education system; it is the main funding body of the public education system and subsidises "private schools under contract" which receive approximately 20% of school pupils. Still at local level, and since the start of a process of decentralisation of competences in the administration of the educational system in the 1980s, local authorities have been playing an increasingly significant part in governance, ensuring the material operation of the system (construction and maintenance of school buildings, school transport,

supply of educational materials, etc.). With regard to schools, collèges and lycées (CITE 2 and CITE 3) have room for manoeuvre in how they manage budgets granted by the State, as well as in the definition of what educational strategies to adopt in order to achieve national objectives. At higher education level, governance of the system is ensured by a contractual policy set up by the State with universities, which are autonomous bodies financially and administratively speaking.

On the local level, local authorities (regions, départements and municipalities) have competence in the administration and material operation of the school system: pursuant to the law of 13 August 2004 relating to local freedoms and responsibilities, local authorities take charge of building, rebuilding, extending, conducting major repairs and equipping institutions under their responsibility: primary schools for municipalities, collèges for départements and lycées for regions. Secondary schools (collèges and lycées) have some room for manoeuvre in the elaboration of strategies to achieve national educational policy objectives, expressed in the school project. In higher education, universities have administrative, financial, educational and scientific autonomy. They have the power to determine their by-laws and structures. There are several consultation bodies on the regional, academic and departmental level which contribute to local governance of the education system. The Region is responsible for:

- the building of and work on upper secondary schools: general, technological and professional lycées;
- subsidies for their equipment and operating expenditure;
- recruitment and management of technical, operative and service personnel (TOS) in lycées;
- organisation of educational, sporting and cultural activities in school premises;
- the region's apprenticeship and vocational training policy for young people and adult job-seekers or adults seeking redeployment.

The Département is responsible for:

- building of and work on collèges (lower secondary schools), subsidies for equipment and operation of collèges;
- recruitment and management of technical, operative and service personnel (TOS) in collèges;
- organisation of educational, sporting and cultural activities in school premises;
- organisation and operation of school transport.

The municipality is responsible for:

- the location, building, equipment, operation and maintenance of nursery and elementary schools (primary education);
- the management of equipment and operation credits for schools;
- organisation of educational, sporting and cultural activities in school premises;
- it can change pupils' start and finish times as well as school rhythms and establish, for example, a four-day week;



- it manages non-teaching staff.

**What level and kind of investment is currently being deployed into key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills?**

Over the past few years, France's education system has undergone a number of major reforms:

- a curricular reform : in application of the Guidance and Planning Law for the Future of Schools of 23 April 2005, the decree no. 2006-830 of 11 July 2006 defined a Common Base of Knowledge and Skills that all pupils must progressively acquire throughout their compulsory schooling (from 6 to 16 years of age). The reform led to changes with regard to educational objectives, programme content – from ISCED 0 up to ISCED 3 – and assessment of learning.
- a reform of upper secondary education (reform of professional lycées – Official Bulletin special edition no.2 of 19 February 2009 and Official Bulletin special edition no.9 of 15 October 2009 – and reform of general and technological lycées – Official Journal of 28 January 2010 and Official Bulletin special edition no.1 of 4 January 2010). Beyond the changes specific to each scholastic path, the two reforms seek to raise levels of qualification among young people, their integration into professional life, and their pursuit of higher educational studies, and to reduce numbers of unqualified school-leavers.
- a reform of teacher recruitment and training (Official Bulletin no.29 of 22 July 2010), with a Master's degree (five years of higher education) now being required for recruitment into and exercise of the profession.
- a reform of universities (Law no.2007-1199 bearing on the liberties and responsibilities of universities, of 10 August 2007), which seeks to increase the drawing power and competitiveness of French universities by according them greater autonomy in budget management and recruitment policies.

**What strategic objectives are attributed to key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills? How is key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills linked to other policy agendas**

The present government places high priority on education and employment. Begun in July, 2012, a large-scale consultation involving many different players on initial and further vocational training links education to employment. A bill on apprenticeship development and vocational training should be ready for presentation to the Council of Ministers by June, 2013. The specific recommendation for France for the European Semester 2012 are:

- Take actions to increase adult participation in lifelong learning;



- Improve youth employability especially for those most at risk of unemployment, by providing for example more and better apprenticeship schemes which effectively address their needs.

In 2009, the Council of the European Union adopted Conclusions setting up a strategic framework for European cooperation in education and training, ET2020. Four long term strategic objectives for EU education and training policies were adopted for 2020:

- Making lifelong learning and mobility a reality;
- Improving the quality and efficiency of education and training;
- Promoting equity, social cohesion and active citizenship;
- Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

Europe 2020 is a 10-year strategy for a smart, sustainable and inclusive growth. The strategy identifies a number of key areas which concern the field of education and training: a common headline target with twin targets on early school leaving and higher education participation; country specific recommendations; the Annual Growth Survey under the European semester of economic governance; the question of investment in education; and the agenda for New skills and jobs.

In January, 2013 the French government published its projet de loi d'orientation et de programmation pour la refondation de l'Ecole (Guidance and Programming Bill for Re-organising School). It will be submitted to Parliament for debate and a vote from mid-March, 2013. The main fields covered are the following:

- initial education and further teacher training;
- learning cycles and teaching content;
- communication and information technologies;
- the guidance and professional-integration systems;
- dialogue with education partners and evaluation bodies.

Restructuring initial and further education in the teaching profession and education After reforming the masters pathway (B.O. no. 29 of 22 July, 2010), which raised the academic level of all primary and secondary school teachers, 2012 saw the government decide to implement the new initial education and further training of teachers, a major leverage in improving the educational system. To this end "écoles supérieures du professorat et de l'éducation" (i.e. teacher-training colleges - ESPE) will be opened in universities at the start of the 2013 academic year. Initial education and further training given in these colleges will include information technologies as a training, teaching and research tool. To diversify the social backgrounds of future teachers 6,000 "teaching jobs with a future" will be created at the start of the 2013 school year. This provision will give more scholarship students the opportunity to choose teaching as a profession by offering them both a career path and financial support. The national educational system will recruit 18,000 future teachers by 2015. Starting in their second "licence" year, then for the next three years, selected

scholarship students will enjoy financial aid and do paid work in schools. They will commit to sitting a competitive teacher-recruitment exam after three years.

Reducing the number of students in difficulty at all levels and building successful careers for all

The government has committed itself to restarting enrolment for children under three. While in 2000 35.4% of 2-year-olds were enrolled in nursery school, by 2011 the percentage had fallen to 11.6% (RERS, 2012). The government's objective is to increase that percentage to above 30% within three years by prioritising the enrolment of children from disadvantaged backgrounds so as to facilitate their chances of success at school from an early age. The "More Teachers than Classes" provision in elementary schools will be put in place at the start of the 2013 school year in order to enhance teaching practices and to provide in-class help for acquiring basic skills. Reforming school hours—with the return to nine half-days per week to alleviate daily class time—will be progressively implemented from the 2013 return to school. It will include personalised tutoring for all during class time. And the relationship between teaching time and extra-curricular time will be reconsidered. Municipalities will be able to draw from a fund for developing extra-curricular activities.

Rethinking priority education and enhancing policies for academic attainment

The comité interministériel pour la modernisation de l'Etat (the interdepartmental committee for modernising the State, CIMAP) has scheduled an overall evaluation of the priority education policy. This evaluation will feed the brainstorming that will contribute to generally rethinking academic attainment in connection to a town's policies. To this end a working group led by the executive management of education has been instituted. Reduce early school-leaving and facilitate the transition from school to work by developing quality traineeships, apprenticeships and dual learning models - classroom-based education combined with hands-on experience in the work place. Efforts to develop entrepreneurial skills are needed to support new business creation and improve employability levels of the young. Reducing academic failure is a government priority. In 2012 the French President vowed to reduce by half the number of early school leavers by 2017 and offer every school leaver from 16 to 18 a training solution. The actions taken by the government intend on the one hand to prevent early leaving by reducing academic failure (early detection and help for students in difficulty; improving guidance) and, on the other, to provide young people with a real chance to re-engage in education. Beginning in December, 2012, the Department for Education called for the implementation of new networks to mobilise all players working with early school-leavers (the "Work-Study Objective" networks).

Education through apprenticeship and work-study schemes has, moreover, been much developed over the past ten years in the form of two kinds of contracts, i.e. the apprenticeship contract (initial education) and the vocational career contract (further training). A bill for developing apprenticeship and career training is to be presented to the Council of Ministers in June, 2013. Develop and implement "youth guarantee"

schemes whereby every young person under the age of 25 receives an offer of employment, continued education, an apprenticeship or a traineeship within four months of leaving formal education or becoming unemployed. Such schemes can be co-financed by the European Social Fund. Law no. 2012-1189 of 26 October, 2012 established *emplois d'avenir* ("jobs with a future"). The purpose of "jobs with a future" is to facilitate the vocational integration of jobless young people from 16 to 25 with few or no qualifications and who find it hard to gain access to employment. This will be done by recruiting them in activities of a socially useful nature or with a high potential for creating jobs. The sectors involved are essentially the non-market developmental sectors or those with high social usefulness, i.e. the green or digital streams, social and medical-social sectors, activities, tourism and personal care-giving. Accessing the market sector will be done with certain conditions. The State will cover 75% of the gross minimum-wage salary for a maximum period of three years. Aid in the market sector will see 35% go to employers who will be selected according to their plans for intern supervision and the training activities they propose.

The government's goal is to integrate 100,000 young people into the jobs market in 2013, then 50,000 more from 2014. The "jobs with a future" contract adds to the following already-existing provisions for integration and job security:

- the job-security contract (law no. 2011-893 of 28 July, 2011), addressed employees whose economic redundancy is planned in a company not subject to the obligation to offer paid leave for redeployment. The purpose of this contract, that lasts a maximum of 12 months, is to organise and develop the process of returning to work, if need be, through retraining or the a company creation or buyout
- the single reintegration contract (law no. 2008-1249 of 1 December, 2008) combines training and financial aid to facilitate the hiring of people whose job applications are habitually rejected
- the vocational training contract (law no. 2004-391 of 4 May, 2004) offered by a company is intended for young people from 16 to 25 inclusive, job seekers 26 and over and those receiving certain benefits. It gives access to work-study training ("training centre–company") culminating in a recognised vocational certificate or degree. It is funded by the company, which the State dispenses from paying social security contributions.

Improve access to lifelong-learning systems throughout working life, including for older workers, by strengthening partnerships of public and private institutions involved in the provision, application and updating of specific skills. Lifelong learning is a core value in the present government's policy for employment and education. There are plans for presenting the Council of Ministers in June, 2013 with a bill for developing apprenticeship and initial and further vocational training. Improve the connection between education and lifelong-learning systems and labour market needs. Short-cycle tertiary qualifications of two years, focused on areas where a skills shortage has been identified, as well as targeted mobility schemes, can provide particularly effective in current circumstances. One of the priority objectives of schools and higher learning is to provide an understanding of business and vocational integration.

In this regard the Department for Education plans to set up an Education-Economics Board in 2013 that will bring businessmen and women together. Along the same lines, the Minister intends to create real information and guidance pathways to teach young people from lower secondary school (ISCED level 2) to university about businesses and their professions, urge companies to explain their professions in classrooms in order for young people to be better informed of job possibilities and ensure that teachers have contacts with the business world during their training. Three training frameworks focusing on business knowledge, entrepreneurship and competitive intelligence are becoming common in all higher education schools. Moreover student awareness of entrepreneurship is becoming widespread in large part due to the "entrepreneurship framework" in all schools and some twenty "student entrepreneurship centres".

### Designing a Portal "Mon Stage en ligne" ("My On-line Internship")

The French portal for business internships, called Mon Stage en Ligne, has been designed by the Office national d'information sur l'emploi et les professions (National Bureau of Information about Employment and the Professions, ONISEP), upon a request by the Departments for Education and Higher Education and Research, to ensure greater educational mentoring and better management of the offer for and demand of training courses and on-the-job periods spent in professional environments. It is aimed at both companies and student interns. The portal is organised into two sections: one for high school students (ISCED level 3) and the other for university students.

### Giving priority to the first university cycle

In the latter half of 2012 the Department for Higher Education and Research organised wide-ranging talks, called the Conference on Higher Education and Research, with all players and partners concerned. In the coming months a guidance and programming bill will be discussed. Steps will be taken to reduce academic failure in the first university cycle. The future guidance bill will undertake to simplify and clarify the training on offer by reducing the number of degrees by at least ten-fold whilst increasing the number of graduates. More broadly, students throughout the first university cycle will be able to finalise their personal and professional projects with diversified pathways, progressive specialisation and bridges for redirecting their studies to different fields.

### New skills and Jobs

Efforts are made in secondary and higher education both to encourage pupils and students to get transversal competences throughout their schooling and to increase clarity between training and the employment market. According to the guidance and planning law for the future of schools of 23 April 2005, the notion of "competence" has been introduced in the school syllabus (ISCED 1 and 2). A "common base of knowledge and skills" that each pupil should master at the end of compulsory education has been defined. Each major skill is designed as a combination of

fundamental knowledge, capacities to be implemented in various situations and attitudes needed throughout life. These skills are assessed and legible throughout all the pupil's schooling, in a personal competences record book. In addition, a career and training discovery programme is proposed to pupils throughout their schooling, at secondary level. This guidance system is aimed at acquiring knowledge, skills and aptitude which are useful all throughout life, like "social and civic" skills as well as those pertaining to "autonomy and initiative". At higher education level, at the start of academic year 2010, a reflection process was initiated on the definition of a training repository for the first university cycle. These repositories should define the volume of training proposed per diploma, expected skills and knowledge and assessment methods, in order to increase clarity between training and the employment market. Besides, the validation of acquired experience (VAE - validation des acquis de l'expérience) created by social modernisation law no. 2002-73 of 17 January 2002 is a measure that allows anyone, regardless of their age, level of qualification or status, to validate acquired experience to obtain a professional certificate. The law no.2009-1437 of 24 November 2009 related to lifelong guidance and vocational training aims to ensure that everyone, independent of their status, acquires and updates knowledge and skills favouring their professional development: with this in mind, it establishes the "right to professional information, guidance and qualification" and a whole series of concrete measures to apply, define and implement by the State, regions and social partners a "coordinated national strategy".

The Mission for European and International Relations within the Assessment, Prospects and Performance Directorate (DEPP) is taking an active part in two European projects: the ESCO project (European skills, competencies and occupations) and the project link to the "Network of Observatories on Skills Needs and Mismatches".

### 4.3 Past and current initiatives and projects in Schools

The strategy identifies a Europe 2020 headline target with two underlying targets for education and training to be reached by the EU by 2020:

- to reduce the share of early school leavers to less than 10%;
- to increase the share of the population aged 30–34 having completed tertiary or equivalent education to at least 40%.

French government has translated these two EU wide-targets into specific national initiatives and project in schools:

#### 1) To reduce the share of early school leavers to 10%

French authorities have set the goal of reducing the percentage of early school leavers to 9.5%, i.e. the proportion of youths from 18 to 24 who leave the educational system with at best a secondary school degree (ISCED level 3C, short cycle) and who do not enter a training programme. The percentage in 2011 was 12% and 12.6% in 2010 (Eurostat). This percentage has remained fairly stable since 2003. In 2012



France's President vowed to halve the number of early school leavers by 2017. There are two parts to the government's actions, on the one hand to prevent early school leaving and on the other, to offer young people a real chance of meaningful training.

## 2) Preventive actions

Early school-leaving is part of the broader issue of academic failure. So measures shall be adopted as early as primary school to prevent academic failure. Strengthening student supervision in primary schools and personalised study-support in school hours are examples of measures with an eye to seamlessly detecting early learning difficulties while not stigmatising the student and avoiding excessive recourse to repeating a year. Secondary schools' plans of action (projet d'établissement) must include specific objectives mobilising the entire educational staff for reducing absenteeism. A reference person on the staff shall be appointed in schools that are particularly affected by academic failure. It will be this person's job to detect students at risk of failure and mentor young people who return to education/training after having dropped out. Improved guidance provisions are also planned.

## 3) Actions fostering a return to education/training

From late 2011, a detection system (SIEI, an interdepartmental system of information exchange) makes it possible to draw up lists of young school leavers. The list is then sent to the 360 "school-leaver support and follow-up platforms" that exist in France. Also instituted in 2011, they are a way to co-ordinate local players who are active in training, guiding and integrating young-people. A new system was initiated in December, 2012 by the French Department for Education called ROFE, Réseau Objectif Formation-Emploi (the Work-Study Objective Network). By interacting with the platforms it should enable young school leavers to be offered a personalised return path to education and training that will result in employment. The ROFEs should mobilise all players who work with young school leavers, e.g. head teachers, anyone working for youth integration, guidance counsellors and psychologists, tutors, etc. The goal is to offer every young school leaver a way back to education and training as part of a "Work-Study Objective" contract signed either by the young person or their families if they are minors. The following are the phases of this path back to education and training:

- a young person is contacted by a support and follow-up platform;
- the "Work-Study Objective" network invites the young person to a face-to-face interview to discuss their needs and desires and an evaluation is made of their academic level;
- should the young person wish, an induction period is arranged as part of the more general integration project to help build a successful, personalised project
- a return to education is offered either as an initial educational course in a "traditional" school, or in a specific class devoted to young school leavers, or

in apprenticeship or as further training. Other solutions outside of the national educational scheme may also be offered (civic service, for example) in connection with the platform's interdepartmental players;

- the young person is mentored by a tutor throughout their new training with stock being taken on a regular basis.

#### **4) To increase the share of the population aged 30–34 having completed tertiary education or equivalent to at least 40%**

In 2011 the percentage of higher-education graduates in the 30 to 34 year-old age group stood at 43.4% and in 2010 at 43.5%, putting France perceptibly above the European average, which was 34.6% in 2011 (Eurostat). This percentage has risen by over 10 points since 2000. Guidance and planning law no. 2005-380 of 23 of April, 2005 for the future of schools set the objective of leading 50% of an age group to a higher education degree. In 2009 (the latest available statistics) this percentage stood at 46.4% for successful initial-education candidates (L'état de l'enseignement supérieur et de la Recherche, 2011 – The State of Higher Education and Research, 2011, DfE/DEPP). From 2008 to 2012 specific steps were taken to reach this goal, in particular the Plan pluriannuel pour la réussite en licence ("The Multi-annual Plan for Attaining a Licence", i.e. bachelor's degree). In this framework universities have implemented concrete measures for helping students, e.g. induction periods, increased educational supervision, support for struggling students, more profession instruction, a quality approach, etc. Attainment for all students is a priority for the present government. A bill for Higher Education and Research shall be submitted to the Council of Ministers by March, 2013. And there are plans for taking steps to simplify the higher education landscape and making the First Cycle's teaching offer easier to understand.

#### **5) A case study: "The school project"**

The school project is the expression of secondary schools' (collèges and lycées) autonomy recognised by the State. It was made compulsory by the guidance law n° 89-486 of 10 July 1989. In this project, the educational community of each school (i.e. management staff, teachers, guidance personnel, parents, pupils) defines the most appropriate strategy - depending on pupils' needs and local resources - to attain the educational objectives set at the national and académie's level. This implies choices in terms of:

- management of space and premises;
- management of school rhythms (timetable in the school day, in the week);
- availability of educational material;
- definition of specific educational provisions to implement national objectives and curricula.

In its project, the school ensures the consistent application of provisions that contribute to its own educational policy:



- reception and information of parents;
- guidance;
- documentary policy;
- individual monitoring of pupils;
- opening onto the economic, cultural and social environment;
- European and international opening;
- health education;
- civic education;
- environmental education for sustainable development.

## 6) from the "Creativity and Innovation best practices EU 2009"

"Cre'actor": new networks to help young people create their own future.

Young people with a low level of academic attainment may often suffer from low self-esteem. Cre'actor is a 3-year project aiming to help them gain confidence and play an active role in society by setting up their own businesses. The project's innovative approach has produced some creative outcomes. The first phase of the project investigated just how realistic it is for low academic achievers, especially those aged under 26, to set up their own business. Specially commissioned research sought the views of key agents – public authorities, financial organisations and trade unions. The conclusions were cautiously optimistic. Key factors for success were identified, but it was agreed that even if projects failed, the young people involved would benefit from the training and support offered to them. The research also identified support systems already in place in the 5 partner countries to help business start-up. The final preparatory stage was to identify organisations in partner countries which could form a network to advise on training methodology and help develop support structures. In all, 304 organisations joined the network – over 60 for each partner country. On the basis of the research, partners developed a methodology to guide young people during all stages of the start-up process. In consultation with the network organisations, 10 packages were devised, each offering the most appropriate support and guidance for each stage of the process. Packages include workshops, simulation software, documents, questionnaires, useful books and websites – and a network of other 'cre'actors' to share experiences. Network organisations also offered mentoring to the trainees. 15 young people were recruited to join the project as 'cre'actors' – creative actors in building their own future. They succeeded in launching 10 new enterprises, some working together. Testimonies on the website show their enthusiasm for the project and the concepts behind it. All involved in Cre'actor – young people, network organisations and partners – gave feedback about the progress of the project and changes were made to address these comments. So the project has created a whole new methodology which has been user-tested and can now be adapted in other countries across Europe. It has also created new networks, demonstrating models for innovative collaboration between organisations.

## 5. Germany

### 5.1 National context

#### Population, economic and social characteristics

Germany officially the Federal Republic of Germany is a federal parliamentary republic in western-central Europe. The country consists of 16 states and its capital and largest city is Berlin. Germany covers an area of 357,021 square kilometres (137,847 sq mi) and has a largely temperate seasonal climate. With 80.3 million inhabitants, it is the most populous member state in the European Union. Germany is the major economic and political power of the European continent and a historic leader in many theoretical and technical fields.

Description of the types of education and training (formal and informal) that occur in a country

In the Federal Republic of Germany responsibility for the education system is divided between the Federation and the Länder. The scope of the Federal Government's responsibilities in the field of education is defined in the Basic Law (Grundgesetz). Unless the Basic Law awards legislative powers to the Federation, the Länder have the right to legislate. Within the education system, this applies to the school sector, the higher education sector, adult education and continuing education. Administration of the education system in these areas is almost exclusively a matter for the Länder.

In addition to the division of responsibilities described above, the Basic Law also provides for particular forms of cooperation between the Federation and the Länder within the scope of the so-called joint tasks (Gemeinschaftsaufgaben). Early childhood education and care is not part of the state-organised school system in Germany but almost exclusively assigned to the child and youth welfare sector. On the federal level, within the framework of public welfare responsibility lies with the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend – BMFSFJ), on the level of the Länder, the Ministries of Youth and Social Affairs and, in part, also the Ministries of Education and Cultural Affairs, are the competent authorities. As a rule, in the year in which children reach the age of six, they are obliged to attend primary school. All pupils in Germany enter the Grundschule which in almost all Länder covers grades 1 to 4. Following the primary school stage, secondary education in the Länder is characterised by division into the various educational paths with their respective leaving certificates and qualifications for which different school types are responsible. Once pupils have completed compulsory schooling they move into upper secondary education. The range of courses on offer includes full-time general education and vocational schools, as well as vocational training within the duales System (dual system). The tertiary sector encompasses institutions of higher education and other establishments that offer study courses qualifying for entry into a

profession to students who have completed the upper secondary level and obtained a higher education entrance qualification. As part of lifelong learning, continuing education is assuming greater importance and is increasingly becoming a field of education in its own right. In response to the vast range of demands made on continuing education, a differentiated structure has been developed.

In the Federal Republic of Germany responsibility for the education system is determined by the federal structure of the state. Unless the Basic Law (Grundgesetz) awards legislative powers to the Federation, the Länder have the right to legislate. Within the education system, this applies to the school sector, the higher education sector, adult education and continuing education. Administration of the education system in these areas is almost exclusively a matter for the Länder. Detailed regulations are laid down in the constitutions of the Länder and in separate laws of the Länder on early childhood education, on the school system, on higher education, on adult education and on continuing education. Responsibility for the remuneration and pensions of civil servants (e.g. teachers, professors and junior professors) also lies with the Länder. The scope of the Federal Government's responsibilities in the field of education is defined in the Basic Law, according to which the Federation bears responsibility particularly for the regulations governing the following domains of education, science and research:

- In-company vocational training and vocational further education
- Admission to higher education institutions and higher education degrees (here the Länder may enact laws at variance with the legislation of the Federation)
- Financial assistance for pupils and students
- Promotion of scientific and academic research and technological development, including the promotion of up-and-coming academics
- Youth welfare (in particular early childhood education and care in day-care centres and child-minding services)
- Legal protection of participants of correspondence courses
- Regulations on entry to the legal profession
- Regulations on entry to medical and paramedical professions
- Employment promotion measures as well as occupational and labour market research
- Furthermore, the Federation has legislative authority over the status-related rights and duties of civil servants, as well as the legislative authority over foreign affairs.

### Early Childhood Education and Care

Early childhood education is provided by institutions catering for children from a few months to six years, the age at which they usually start school. Children of school age who have not yet attained a sufficient level of development to attend a school have a further option in some Länder, namely Schulkindergärten and Vorklassen. These institutions are either assigned to the early childhood or the primary sector according to the particular Land. Attendance is usually voluntary, although in most of the Länder in question the authorities are entitled to make it compulsory.

## Compulsory education

As a rule, general compulsory schooling begins for all children in the Federal Republic of Germany in the year in which they reach the age of six and involves nine years of full-time schooling (ten years in Berlin, Brandenburg, Bremen and Thüringen; in Nordrhein-Westfalen, the duration of full-time compulsory education is nine years for the Gymnasium, and ten years for other general education schools). Those young people who do not attend a full-time general education school or vocational school at upper secondary level once they have completed their period of compulsory general schooling must still attend part-time schooling (compulsory Berufsschule attendance – Berufsschulpflicht). This usually lasts three years, according to the duration of training in a anerkannter Ausbildungsberuf (recognised occupation requiring formal training). For pupils who do not attend a general education school at upper secondary level or enter training, some Länder have regulations under which pupils are required to remain in full-time education and attend some sort of vocational school. Disabled children and young people are also required to attend school and complete their compulsory education. On the basis of their sonderpädagogischer Förderbedarf (special educational needs), they are either taught in mainstream schools together with non-handicapped pupils, or in Förderschulen (special schools). Compulsory schooling involves regular attendance of lessons and other compulsory school events. Both pupils and parents are responsible for seeing that this obligation is met and training companies are also responsible for ensuring that their trainees fulfil their obligation to attend vocational school. The school head checks on attendance records and can, if necessary, enforce attendance through various measures against the pupil, parents or the training company.

## Primary education

As a rule, in the year in which children reach the age of six, they are obliged to attend primary school. All pupils in Germany enter the Grundschule (primary school) which covers grades 1 to 4. In Berlin and Brandenburg, the Grundschule covers six grades. For pupils with sonderpädagogischer Förderbedarf (special educational needs), whose development cannot be adequately assisted at mainstream schools, a range of Förderschulen (special schools) exists, which are also known as Sonderschulen, Förderzentren or Schulen für Behinderte in some Länder.

## Transition from primary to secondary education

The transition from the Grundschule to one of the different lower secondary school types where pupils remain at least until the completion of their full-time compulsory education is dealt with differently depending on Land legislation. The vote of the school which the pupil is leaving is taken as a basis for the decision or as guidance in the decision regarding the pupil's future school career. This is accompanied by detailed consultations with parents. The final decision is taken either by the parents or the school or school supervisory authority. For certain school types, it is dependent on pupils demonstrating a certain level of ability and/or on the capacity available in

the desired school. For an overview of regulations specific to the various Länder with regard to the transition from the Grundschule to lower secondary education, see the website of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (Kultusministerkonferenz). Secondary education Following the primary school stage at which all children attend mixed-ability classes (grades 1 to 4, in Berlin and Brandenburg grades 1 to 6) the structure of the secondary school system (grades 5/7 to 12/13) in the Länder is characterised by division into the various educational paths with their respective leaving certificates and qualifications for which different school types are responsible, namely

- Hauptschule
- Realschule
- Gymnasium
- Schularten mit mehreren Bildungswegen

The Hauptschule, Realschule and Gymnasium are school types usually offering one course of education in which all teaching is channelled to a specific qualification. Schularten mit mehreren Bildungsgängen (schools offering more than one type of course of education) bring two or three courses of education under one umbrella. For pupils with sonderpädagogischer Förderbedarf (special educational needs) whose development cannot be adequately assisted at mainstream schools, various types of Förderschulen (special schools, also known in some Länder as Sonderschulen, Förderzentren or Schulen für Behinderte) have been set up within the organisational framework of general and vocational education. Once pupils have completed compulsory schooling – generally when they reach the age of 15 – they move into upper secondary education. The type of school entered depends on the qualifications and entitlements obtained at the end of lower secondary education. The range of courses on offer includes full-time general education and vocational schools, as well as vocational training within the duales System (dual system). The majority of the Länder offer the following general education and vocational schools, with some forms specific to individual Länder: General education schools:

- Gymnasium
- Schularten mit drei Bildungsgängen
- Kolleg

Vocational schools:

- Berufsschule
- Berufsfachschule
- Fachoberschule
- Berufsoberschule
- Berufliches Gymnasium/Fachgymnasium

Tertiary education



The tertiary sector encompasses institutions of higher education and other establishments that offer study courses qualifying for entry into a profession to students who have completed the upper secondary level and obtained a higher education entrance qualification. The Federal Republic of Germany has the following types of higher education institutions:

- Universitäten, Technische Hochschulen/Technische Universitäten, Pädagogische Hochschulen, Theologische Hochschulen
- Kunsthochschulen and Musikhochschulen (colleges of art and music)
- Fachhochschulen

Additionally there are a number of special higher education institutions which only admit certain groups, e.g. higher education institutions of the Federal Armed Forces and Verwaltungsfachhochschulen, and are not considered below. Those with a higher education entrance qualification may also choose to enter a Berufsakademie offered by some Länder as an alternative to higher education. At state or state-recognised Studienakademien (study institutions) and in companies students receive academic but, at the same time, practical career training. The Fachschulen and the Fachakademien in Bayern are also part of the tertiary sector. Fachschulen are institutions of vocational continuing education that, as a rule, call for the completion of relevant vocational training in a anerkannter Ausbildungsberuf (recognised occupation requiring formal training) and relevant employment.

### Practices and organisations

Within the Federal Government, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung – BMBF) is primarily responsible for the Federation's areas of responsibility. The Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familien, Senioren, Frauen und Jugend – BMFSFJ) is responsible for the instruction, education and care of children in day-care centres and in child-minding services. The Federal Ministry of Education and Research was created as the Federal Ministry of Education and Science in 1969 in connection with the amendment to the Basic Law (Grundgesetz), which gave the Federation additional responsibilities in the educational sector. It was then merged in 1994 with the Federal Ministry of Research and Technology. Wherever necessary, consultations between Federation and Länder take place in the Bundesrat, the Joint Science Conference (Gemeinsame Wissenschaftskonferenz – GWK), the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) and the Science Council (Wissenschaftsrat). The Federal Ministry of Education and Research is organised in one Central Directorate-General and seven Directorates-General:

- Directorate-General 1: Strategies and Policy Issues
- Directorate-General 2: European and International Cooperation in Education and Research
- Directorate-General 3: Vocational Training; Lifelong Learning
- Directorate-General 4: Science System



- Directorate-General 5: Key Technologies – Research for Innovation
- Directorate-General 6: Life Sciences – Research for Health
- Directorate-General 7: Provision for the Future – Basic and Sustainability Research

The purview of the Federal Ministry of Education and Research embraces the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung – BIBB). It is a major instrument for cooperation between employers, trade unions, Federation and Länder at the national level. The Vocational Training Act (Berufsbildungsgesetz) defines the institute's responsibilities as follows:

- to carry out vocational training research under a pre-defined research programme;
- in accordance with the instructions of the competent federal ministry, to take part in the drafting of Ausbildungsordnungen (training regulations) and other ordinances, to take part in the preparation of the Report on Vocational Education and Training (Berufsbildungsbericht), to take part in the compilation of vocational training statistics, to promote pilot schemes, to take part in international cooperation in the field of vocational education and training, as well as to assume further administrative tasks of the Federation for the promotion of vocational education and training;
- in accordance with general administrative provisions of the competent federal ministry, to implement the promotion of intercompany training centres and support the planning, establishment and further development of these facilities;
- to maintain and publish the register of anerkannte Ausbildungsberufe (recognised occupations requiring formal training);
- to carry out the tasks described in the Law on the Protection of Participants in Distance Education (Fernunterrichtsschutzgesetz) and to contribute to the improvement and extension of vocational distance learning through the promotion of development projects.

With the consent of the Federal Ministry of Education and Research, the Federal Institute for Vocational Training may conclude contracts with other parties outside the Federal Administration for the assumption of further tasks. Vocational training in Germany is based on the consensus principle. Whenever major decisions on structure and substance have to be taken, such decisions are reached in a joint effort by Federation and Länder, employers and employees. These groups – as well as a representative of the municipal associations, of the Federal Employment Agency (Bundesagentur für Arbeit) and of the Research Council acting as advisors – are members of the Federal Institute for Vocational Training's board, which thus represents the Round Table of vocational education and training. The Research Council is intended to control, assure and evaluate the quality of the institute's research efforts.

The Ministries of Education, Cultural Affairs and Science The Ministries of Education, Cultural Affairs and the Ministries of Science in the Länder (which have different titles

in the various Länder) in their capacity as highest authorities of a Land are responsible for education, science and culture. Their scope of responsibilities generally includes schools, higher education, libraries, archives, adult education, arts and culture in general, relations between the state and religious or ideological communities, (known as Kultusangelegenheiten), the preservation of monuments and sites and, in some Länder, also sport and youth welfare. The Ministries of Education, Cultural Affairs and Science develop policy guidelines in the fields of education, science and the arts, adopt legal provisions and administrative regulations, cooperate with the highest authorities at national and Land level and supervise the work of authorities under their purview and of subordinated bodies, institutions and foundations. To assist the ministries in their work the Länder have established their own institutes for school education, higher and continuing education. The Ministries of Education and Cultural Affairs (in Berlin, Bremen and Hamburg: Senate department) are headed by a Minister/Senator who is answerable to parliament. The Minister is usually represented by a State Secretary (Staatssekretär) or Director-General (Ministerialdirektor). In 9 Länder separate Ministries for science and research have been established in addition to the Ministries for schools.

#### Pre-school institutions

The education, upbringing and supervision of children from the age of a few months to school age is almost exclusively assigned to the child and youth welfare sector. On the federal level, within the framework of public welfare responsibility lies with the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend – BMFSFJ), on the level of the Länder, the Ministries of Youth and Social Affairs and, in part, also the Ministries of Education and Cultural Affairs, are the competent authorities. In some Länder, Vorklassen (pre-school classes) for children who are ready for school but are not yet of school age, or Schulkindergärten (school kindergartens) and Vorklassen for children of compulsory schooling age who are not yet ready for school exist. As a rule, these institutions are accountable to the school supervisory authorities. Public supervision (operating licence) to protect children in day-care centres maintained both by public and non-public bodies is generally exercised by the youth welfare offices of the Länder (Landesjugendämter) which are the responsible bodies at Land level for the public child and youth welfare services. This covers compliance with the framework guidelines applicable to group size or staff-to-child ratios, staff qualifications, the space required, and standards relating to equipment, hygiene and safety.

The principles of education policy in the elementary sector are laid down in the Common Framework of the Länder for early education in the early childhood sector (Gemeinsamer Rahmen der Länder für die frühe Bildung in Kindertageseinrichtungen) which was resolved by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz) and the Youth Ministers Conference (Jugendministerkonferenz) in 2004. On the level of the Länder, education plans specify the basic notion of education and describe the day-care centres' independent responsibility for education. The responsibility for the actual

educational work performed in the individual day-care centres lies with the maintaining body.

For children under three years of age, moreover, since 2005 child-minding services have gradually been upgraded as an equal-ranking, alternative form of care and the quality of these services developed. Permits for child-minding services are issued by the local youth welfare office [Jugendamt] and are dependent on the establishment of the personal suitability of the childminder and also, as a rule, on evidence of a basic qualification. The legally enshrined educational mandate also extends to child-minding services.

### School supervision and administration

Under the Basic Law (Art. 7 Paragraph 1) and the constitutions of the Länder, the entire school system is under the supervision of the state. Supervision of the general and vocational school system is the responsibility of the Ministries of Education and Cultural Affairs in the Länder in their capacity as the highest educational authorities. The duties of the Ministries of Education and Cultural Affairs in the Länder and of the subordinate education authorities include the organisation, planning, management and supervision of the entire school system. The Länder sphere of influence also includes the detailed regulation of the school's mission and its teaching and educational objectives (internal school matters) within the framework of the education acts. The educational objectives presented in school legislation are given concrete shape in the curricula for which the Minister of Education and Cultural Affairs of the respective Land is responsible. In order to implement the curricula for the various subjects in the different types of school, textbooks are used as learning material in the classroom. These books must be approved by the Ministries of Education and Cultural Affairs, and a list of approved books is published regularly. While the State is responsible for internal school matters, the school-maintaining bodies assume responsibility for external school matters. The public maintaining bodies of schools are, as a rule, the towns and cities [Städte] and municipalities [Gemeinden] and rural districts [Landkreise] or municipalities with the status of a district [kreisfreie Städte], and to some extent also the Länder. Generally speaking, the school-maintaining body is responsible for external school matters, i.e. school buildings, interior fittings, the procurement and provision of learning and teaching materials, administrative staff and ongoing administration, and also bears the non-personnel costs. The school-maintaining body is also, as a rule, re-sponsible for school organisation measures such as setting up, changing and shutting down schools. The supervision of schools includes Rechtsaufsicht (legal supervision), Fachaufsicht (academic supervision) and Dienstaufsicht (supervision of the staff at public-sector schools). Rechtsaufsicht (legal supervision) involves monitoring the lawfulness of the administration of external school matters, which is usually carried out by the Kommunen (local authorities) in their capacity as Schulträger (maintaining bodies). External matters include the establishment and maintenance of the school building, and the procurement and provision of textbooks and other learning or teaching materials. Fachaufsicht (academic supervision) over teaching and educational work (internal school matters) in all public-sector schools is another responsibility of the school supervisory

authorities. Academic supervision over primary schools and Hauptschulen, Förderschulen (with the exception of residential special schools) and to some extent over Realschulen is exercised by the Schulämter (lower-level school supervisory authorities). The Ministries of Education and Cultural Affairs, sometimes the middle-level school supervisory authorities and the lower-level school supervisory authorities, supervise all other types of school and schools of particular importance. Land authority to carry out academic supervision is derived from the state sovereignty over schools enshrined in the Basic Law. This states that the entire school system is under the supervision of the state. The supervisory authorities are awarded the power to check that schools are keeping to the prescribed curricula and Prüfungsordnungen (examination regulations) by visiting the school and sitting in on lessons, and to take necessary steps. The Fachaufsicht is limited by the individual pedagogical responsibility of the school and the pedagogical responsibility of the teacher. In several Länder, the school supervisory authorities are legally required to respect the individual pedagogical responsibility of the schools. With increasing institutional independence of schools, the role of school supervision changes as well. In some Länder, the school supervision is supplemented by mandatory external evaluation (Schulinspektion, Schulvisitation) which is intended to provide the individual schools with information regarding their quality development. The state's influence on schools is increasingly exercised via the approval of Schulprogramme (school-specific programmes) and the determination of target agreements with the individual schools or head teachers, respectively. During this process, the personal supervision by the school supervisory authorities tends to lose importance compared to the duties of supporting and advising school development and quality management in schools. In this respect, school counselling prepares schools for new tasks and encourages them to promote the pedagogical responsibility of teachers and schools, particularly by instigating a binding agreement that governs pedagogic aims and focal points of the work involved, as well as in the development of school-specific programmes.

Pedagogical responsibility – also termed pedagogical freedom or methodological freedom – includes the right of teachers to teach lessons on their own authority within the framework of the applicable legal provisions. The teacher is guaranteed this freedom in the interests of the pupils, as pupil-oriented teaching can only take place if the teacher has an adequate amount of freedom in selecting the content of lessons, teaching methods and assessment. As the case may be, the pedagogical freedom of the teacher is to be seen in relation to the requirement of acting in a professional manner, and to the pedagogical responsibility of the school. For example, the teachers are bound by the basic pedagogical concepts laid down in the school programmes.

The school supervisory authorities in the Länder also supervise teachers and head teachers of public-sector schools. Staffing issues, management and the general behaviour of the individuals working in the school are subject to such Dienstaufsicht (staff supervision). In some Länder, due to the increasing responsibility of the schools, the Dienstaufsicht has been transferred to the head teachers. In most of the Länder school supervision is organised on two levels and is performed by the

Ministries of Education and Cultural Affairs in the Länder as the highest educational authorities and the school offices (Schulämter) as the subordinate school supervisory authorities. In Baden-Württemberg, Bayern and Nordrhein-Westfalen school supervision is organised on three levels. Here the general administration authorities (Regierungspräsidien, Regierungen, Bezirksregierungen) are at the same time middle-level school-supervisory authorities. In the city states of Berlin, Bremen and Hamburg, and in Saarland, there is just one school supervisory authority in each case.

## 5.2 Policy environment

Given the importance and specific structure of vocational education and training in the dual system of vocational education and training, Germany also counts ISCED level 4 qualifications among the tertiary or equivalent qualifications. To reduce the share of early school leavers even further, in 2010 the Länder adopted a joint support strategy for poorer-performing pupils (Förderstrategie für leistungsschwächere Schülerinnen und Schüler) which includes prevention, intervention and compensation measures. The same year the Federal Government launched, in addition to the existing career-start advice, the initiative Abschluss und Anschluss – Bildungsketten bis zum Ausbildungsabschluss (Qualify and connect – educational chains up to the end of training), which helps young people to achieve a qualification, provides vocational guidance, and support in choosing a career and starting training, as well as during training. As part of the joint qualification initiative “Getting ahead through education” (Aufstieg durch Bildung) of the Federation and the Länder, a range of measures have been adopted and developed from early childhood support through to continuing education, involving in particular the achievement of a school-leaving qualification, the strengthening of vocational guidance in school curricula and the improved transition from school to working life. With a 41.3 per cent share of 30 to 34 year-olds with a tertiary or similar degree in 2010, Germany is well above the EU headline target of 40 per cent. The Federation and the Länder are together making considerable efforts to expand tertiary education. For instance, within the framework of the Higher Education Pact 2020 (Hochschulpakt 2020), the Federation and the Länder are creating study opportunities for an extra 327,000 new entrants in the period 2011 to 2015. Within the framework of the Teaching Quality Pact (Qualitätspakt Lehre) the Federation is providing funding up to the end of 2020 for measures to improve staffing, provide support for training academic teaching staff and safeguard and further develop the high quality of teaching at higher education institutions. This is intended to help increase graduation rates inter alia.

### Investment

Within the framework of the implementation of the measures agreed in the qualification initiative “Getting ahead through education”, the Federation and the Länder have stepped up their financial commitments. They have agreed the target of increasing total government expenditure on education and research to 10 per cent of GDP by 2015. In 2009 and 2010 expenditure on education and research totalled 9.5 per cent of GDP. Especially by continuing the three academic pacts adopted by the



Federation and the Länder – the Higher Education Pact 2020 (Hochschulpakt 2020), Excellence Initiative (Exzellenzinitiative), and Research and Innovation Pact (Pakt für Forschung und Innovation) – the Federation and the Länder are making a substantial contribution to achieving the ten per cent target. The share of total government expenditure on education in GDP increased between 2009 and 2010 from 6.9 per cent to 7.0 per cent. Absolute expenditure rose from Euro 153.9 billion in 2008 to Euro 164.6 billion in 2009 and Euro 172.3 billion in 2010. For the years 2010 to 2013 the Federal Government has agreed to increase expenditure on education and research by Euro 12 billion. In total as much as Euro 13.3 billion has been made available. These increases in expenditure will be implemented in the annual Federal budget.

## **New skills and jobs**

The Ausbildungsordnungen (training regulations) for currently around 350 anerkannte Ausbildungsberufe (recognised occupations requiring formal training) are continuously reviewed and adapted to new requirements in the working world. Significant impetus for the re-structuring of occupations requiring formal training within the dual system comes from the changing skills requirements of the economy. To take account of the complex requirements of the different occupations, modern training regulations are action-oriented, i.e. they lay down not the contents of learning but what skills should be acquired at the end of a training programme. The drafting of new or modernisation of existing training regulations and their coordination with the Länder framework curricula (Rahmenlehrpläne) for teaching in the Berufsschule (vocational school) takes place in a multistage process involving employers, trade unions, the Federation and the Länder.

## **Lifelong Learning Strategies**

In Germany the design of lifelong learning focuses on increasing permeability between and dovetailing of the educational sectors, expanding educational counselling, more effective integration through education, and recognition of qualifications obtained abroad, and the validation of non-formally and informally acquired competences. In their endeavours the Federation and the Länder regard lifelong learning as a key political and social challenge in Germany, which demands great commitment from all social forces. Its realisation is viewed as vital to ensuring equal opportunities for individuals and to social participation, economic success and the future of society. Since the school-leaving certificate forms the basis of every educational biography, it should be possible for everyone to achieve this qualification or to acquire it later in life. Continuing education should remain attractive to people at every stage of life, enabling them to maintain and develop their knowledge and skills and to participate fully in society. In their spheres of competence the Federation and the Länder are implementing, within the framework of the lifelong learning concept, measures in the following areas:

- improving educational opportunities for children under six years of age,
- improving the training situation,



- helping disadvantaged young people to integrate into the labour market,
- facilitating transition from school to higher education and access to higher education without the Abitur for vocationally qualified applicants,
- making learning paths more flexible,
- admitting up to 327,000 extra first-year students until 2015 within the framework of the Higher Education Pact 2020 (Hochschulpakt 2020),
- increasing interest in mathematics and the natural sciences,
- improving opportunities for women,
- improving opportunities for people with a migrant background,
- taking account of the interests of people with disabilities in participating in lifelong learning
- structural improvement of education offers at all stages of life at local level.

By 2015 participation in formal continuing education is to be increased from 43 per cent to 50 per cent, while participation in continuing education by the low-skilled is to be raised from 28 per cent to at least 40 per cent. It is therefore important to strengthen the motivation for lifelong learning still further and thereby initiate educational activities, facilitate access to continuing education, improve continuing education courses, increase the permeability and integration between the educational sectors and consolidate knowledge of and insight into the processes and effects of lifelong learning. The measures proposed by the Federal Government are also part of the qualification initiative for Germany “Getting ahead through education” which was adopted in October 2008 by the Federation and the Länder. The qualification initiative for Germany comprises a catalogue of measures which refers to the overall educational biography. The aim is to enable all people to participate fully in society through education.

## Learning Mobility

In May 2010 the Standing Conference adopted a declaration on mobility in the education sector in Europe (Erklärung zur Mobilität im Bildungsbereich in Europa) in which it emphasises that the mobility of pupils/students and teachers/lecturers forms a key element of education policy collaboration in Europe and represents a core task of the Bologna Process and of the European Union in the education sector. The Standing Conference considers the main obstacles to mobility in the school sector and in higher education to be insufficient information, financial difficulties and problems in recognising credits obtained abroad. Young people are, moreover, to be given an understanding of the many advantages of undertaking mobility and informed about funding opportunities, while the above obstacles to mobility are to be dismantled. Against this background the Standing Conference welcomed the diverse initiatives of the European Union and of the Bologna Process to promote cross-border mobility in the education sector. It particularly welcomed the Lifelong Learning Programme of the EU and the European Qualifications Framework for the Higher Education Sector and Lifelong Learning. According to the November 2011 Conclusions of the Council of the European Union on a benchmark for learning mobility of November 2011, by 2020 an EU average of at least 20 per cent of higher education graduates should have a period of higher education-related study or

training (including work placements) abroad, representing a minimum of 15 ECTS credits or lasting a minimum of three months. As suitable instruments for increased mobility the Standing Conference and the Federal Government support the establishment of a mobility window in the curriculum, financial support for periods abroad and recognition of the study courses and examinations completed abroad. In an international comparison, German students are already more mobile than the average student. The November 2011 Council Conclusions defined for the first time a reference level of European average performance for vocational training. Accordingly, by 2020 an average of at least 6 per cent of 18-34 year-olds with an initial vocational education and training qualification should have had a VET-related study or training period (including work placements) abroad lasting a minimum of two weeks (ten working days), or less if documented by “Europass”. Federation and Länder also advocate including a greater share of the financially or socially disadvantaged and those with special needs or with a migrant background in mobility programmes, and considering additional support in the form of increased rates of funding.

A study published in 2012 by the National Agency Education for Europe (Nationale Agentur Bildung für Europa) at the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung – BIBB), which received funding from the BMBF, recorded the specific acquisition of competences by people with special needs through trips abroad. Trips abroad benefit this group of people in particular by building their personal and social skills and improving their employability. In the LEONARDO DA VINCI sub-programme five per cent of those in receipt of scholarships have special needs. Also within the framework of the Bologna Process the Federation and the Länder are committing themselves to strengthening the international mobility of students. At the eighth ministerial conference on the Bologna Process, in April 2012 in Bucharest the higher education ministers adopted the Mobility Strategy 2020. This took up the 2009 mobility resolutions from Leuven/Louvain-la-Neuve and underpinned them with specific measures. One of the targets set in Bucharest is that, by 2020, 20 per cent of all higher education graduates should have completed a period of study or a work placement abroad representing a minimum of 15 ECTS credits or lasting a minimum of three months.

### **Improving the Quality and Efficiency of Education and Training Basic Skills (Literacy, Mathematics, Science and Technology), Languages**

A good command of the German language is viewed as the key to a successful education and career and forms an important prerequisite for participation in society. The many language-promotion initiatives in the Länder range from procedures to establish language levels prior to enrolment at school, to measures supporting language development through language promotion at primary level and in lower secondary level, and career field-related and subject-integrated language promotion at Berufsschulen and Berufsfachschulen. Parents of children with a migrant background are deliberately involved in language promotion. To further develop quality in the field of language promotion and language diagnostics following a phase of intensive development and expansion, the Federation and the Länder agreed in

October 2012 to implement a joint initiative to develop language promotion, language diagnostics and reading promotion. The joint programme “Bildung durch Sprache und Schrift (BISS)” (education through language and writing) is being implemented at the start of the 2013/2014 school year in day-care centres for children, primary schools and secondary schools. The programme will serve to develop language promotion, language diagnostics and reading promotion in such a way that the existing language skills assessment processes and measures to promote language and reading in day-care centres for children and schools can be further developed through research, and their effectiveness or validity examined. In the programme “Bildung durch Sprache und Schrift (BISS)” networks of day-care centres for children or schools will work closely together to exchange their experiences in the field of language diagnostics and promotion, and to implement and optimise promising measures. Their work will benefit from scientific accompaniment. In December 2011 the Federation and the Länder presented a national strategy for literacy and basic education for adults in Germany, designed to tackle adult reading and writing skills which are not sufficient for full participation in society. As a broad social alliance the strategy is to include, among others, the local authorities (Kommunen), trade unions, churches, and Volkshochschule associations. Industry associations and chambers of industry and commerce are also invited to participate. As their contribution to developing the joint national strategy for literacy and basic education for adults the Länder will be implementing the following measures inter alia:

- the establishment of coordination agencies or contact points for literacy and basic education for those affected, their environment and the specialist public;
- active participation in public relations work to combat functional illiteracy together with the Federation and other partners, to help remove the taboos surrounding the subject of illiteracy in society;
- working for the establishment or continuation of individual funding areas for the subjects of literacy and basic education in the European Social Fund (ESF) 2014-2020 programming period;
- annual reporting on the status of implementation of the measures, commencing in autumn 2013.

The Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung – BMBF) has launched a new initiative on workplace-oriented research and development in the area of literacy and basic education for the period from 2012 to 2015. The funding priority is divided into three spheres of activity:

- Concepts and measures for workplace-oriented literacy and basic education
- Counselling and training for players in the working world and in the daily life of those concerned
- Continuing training programmes for trainers and lecturers in education programmes

In December 2011 the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz – KMK) adopted recommendations to strengthen foreign language skills (Empfehlungen zur Stärkung der

Fremdsprachenkompetenz). As a forward-looking foreign language concept the recommendations have the following objectives:

- expanding language teaching into multilingualism,
- strengthening Europe's cultural diversity,
- promoting mobility and integration,
- preparing for an internationally-oriented business sector and world of work.

These objectives are being achieved through language-learning opportunities coordinated between the Länder, starting with nationwide high-quality foreign language teaching in the primary sector and ranging up to a variety of languages offered in secondary schools. Particular importance attaches to English as a lingua franca and the use particularly of the first foreign language in bilingual subject teaching (Content and Language Integrated Learning – CLIL). The strengthening of foreign language skills is being carried out in line with the following guidelines: With the development of functional multilingualism the Länder are facilitating a consistent and integrated foreign language learning offer from the primary to the tertiary sector taking account of the mother tongues. The development of pupils' intercultural ability to act is one of the core tasks of all teachers. Accordingly, promoting the ability to structure the teaching and learning of languages against the background of intercultural challenges, taking the mother-tongue aptitudes of the pupils into account, is an important part of a future-oriented education, training and continuing training of foreign language teachers. Foreign-language teaching is standards-based and skills-oriented. Its didactics and methodology accommodate different learning styles and the heterogeneity of learning groups. In courses at vocational schools professional requirements are emphasised in foreign language acquisition and the expansion and consolidation of language skills. The basis for defining the attainment level for foreign-language learning from the primary sector to the upper secondary level is the Common European Framework of Reference for Languages (CEFR) with its reference levels. The attainment level for each course described according to the CEFR should appear on the certificate. Foreign-language learning oriented towards specific applications takes place through foreign-language teaching and increasingly also in bilingual subject teaching. Different forms of bilingual work guarantee a variable offer for as many pupils as possible. Foreign language teaching uses and reflects contemporary media. It is supplemented through full-day courses and visits to places of learning outside school inter alia, and through exchange programmes, trips abroad (including within the framework of vocational education and training), work placements, language trips, competitions and through the preparation for school and non-school certificates. The Standing Conference regards the learning of foreign languages as a prerequisite for access to other language communities and for acquiring key dialogue and communication skills. Multiple language acquisition by as many pupils as possible is therefore one of its objectives. More information on foreign-language teaching can be found in the articles on teaching and learning in primary education, lower secondary education, general upper secondary education and vocational upper secondary education as well as in the article on other dimensions of internationalisation in early childhood and school education. A diversified network of private training providers is, moreover, available to adults in the

field of general adult education and vocational further education to improve their language skills. The Länder support structures and measures in these areas through state funding.

### **Professional Development of Teachers, Trainers and School Leaders Pedagogic staff in early childhood education and care**

In 2010 the Standing Conference and the Conference of Ministers of Youth and Family Affairs (Jugend- und Familienministerkonferenz – JFMK) adopted a common orientation framework “Education and Upbringing in Childhood” (Bildung und Erziehung in der Kindheit) to develop the education, training and continuing training of child-care workers. In this context the Länder have

- made practical experience an integral part of training;
- undertaken a quantitative expansion of study courses in the field of early childhood education in order to increase the number of academically trained qualified employees in day-care centres for children;
- improved vertical permeability between Fachschulen, Berufsakademien and higher education institutions;
- increased the number of occupational training places for target groups with professional experience.

In May 2011 the Conference of Ministers of Youth and Family Affairs approved state recognition of Bachelor’s degrees in the field of day-care for children and passed a resolution with regard to the job title. In this resolution the Conference advocates, inter alia, combining the organisation of the state recognition procedure and the procedure to accredit courses of study. As a standard national job title the Conference recommends the title “Staatlich anerkannter Kindheitspädagoge/Staatlich anerkannte Kindheitspädagogin” (state-recognised childhood educator). Based on the common orientation framework the Länder have developed a qualifications profile based on competences for all areas of work of the child-care workers in Fachschule training. The qualifications profile defines the professional requirements for the job and describes the occupational competences which a qualified professional must have in order to exercise the profession at the required level. Generalist training qualifies for employment in the socio-educational fields of work at day-care centres for children, child and youth work, educational assistance, and for social and education activities in the school. The qualifications profile also aims to facilitate the crediting of qualifications acquired at Fachschulen and Berufsakademien to a university degree course and vice versa. The Länder will be expanding the continuing training offers for lateral entrants to qualify as youth or child-care workers. The Federation has introduced measures to significantly raise the share of men working as skilled personnel in day-care centres for children.

### **Teachers**

Due to the principle of cultural sovereignty (Kulturhoheit) and for historical reasons teacher training in the Federal Republic of Germany displays a high degree of



diversification per levels and types of schools. Teacher training has to combine subject-related studies, educational science and subject-related didactics as well as to provide for a meaningful relation between theory and teaching practice during preparatory service. Furthermore, the subjects of the first phase of teacher training have to be adjusted to the subjects of the second, predominantly practical phase. In all Länder, currently efforts are being made to reform teacher training for all types of schools. With regard to the reforms considered necessary, the efforts of many Länder, with particular emphasis on their individual priorities, aim to focus on the following measures, amongst others, to reform teacher training:

- a more extensive practical orientation during teacher training
- intensification of the relations between the theoretical and practical phases of training
- particular significance of the induction period for newly qualified teachers
- the introduction of examinations taken alongside courses of study
- measures to improve teaching practice with regard to diagnostic and methodical competence

The basis for the current reform initiatives are the findings of the 1999 committee set up by the Standing Conference comprising experts from science and from educational administration (Gemischte Kommission Lehrerbildung) and the 2001 recommendations of the Science Council (Wissenschaftsrat) on the future structure of teacher training. The positions of the Gemischte Kommission Lehrerbildung were supported in a joint declaration by the Standing Conference, the teachers' unions and other unions in the field of education of October 2000 regarding the actual duties and responsibilities of today's teachers (Aufgaben von Lehrerinnen und Lehrern heute – Fachleute für das Lernen). According to this declaration, the core responsibility of teachers as experts for learning is to plan, organise and reflect processes of teaching and learning. It is the responsibility of the teacher to impart basic skills and knowledge of methods which enable the individual to master the process of lifelong learning on his own. Teachers carry out the task of education in school and cooperate closely with the parents in promoting positive values, attitudes and actions of the pupils. They assess the performance of the pupils and give advice to pupils as well as to parents. Teachers are to continually develop their competences by participating in in-service and further training courses. With regard to school development they are increasingly asked to participate in committees and institutions on a regional level as well as to carry out administrative tasks and take over responsibility within the school administration. In December 2004 the Standing Conference adopted Standards for Teacher Training: Educational Sciences (Standards für die Lehrerbildung: Bildungswissenschaften). In doing so, it oriented itself around the outline of a profession as described by the Gemischte Kommission Lehrerbildung and in the declaration passed jointly with teachers' unions and other unions in the field of education of October 2000. The educational sciences include the scientific disciplines concerning educational processes, education systems and their basic conditions. The standards describe requirements for the actions of teachers. They refer to competences and thus to the abilities, skills and attitudes that a teacher must possess in order to meet professional requirements. They formulate



competences in educational sciences that are particularly important for initial teacher training and everyday working life and that can be linked to further and continuing education. With regard to the improvement of diagnostic and methodical competence, the introduction of the standards for teacher training provide an additional foundation for a teacher training aimed at enhancing professionalism. The Standards for Teacher Training: Educational Sciences were adopted by the Länder at the start of the 2005/2006 academic year as the basis for the specific requirements of teacher training courses, including practical training components and the Vorbereitungsdienst or preparatory service in the Länder. In October 2008 the Standing Conference adopted common content requirements for subject-related studies and subject-related didactics in teacher training (Ländergemeinsame inhaltliche Anforderungen für die Fachwissenschaften und Fachdidaktiken in der Lehrerbildung) which apply to all Länder, in which, by laying down so-called subject profiles (Fachprofile), it has agreed a framework for the common content requirements for subject-related courses of study (Fachstudium). Within this framework, the Länder and universities may set priorities and define their own specialisations, and also lay down additional requirements. The subject profiles include a description of the competences to be acquired through study and the key individual content requirements. The subject-related skills of future teachers are to be established and developed primarily through courses of study. The requirements for subject-related studies and subject-related didactics, in conjunction with the Standards for Teacher Training, form a basis for the accreditation and regular evaluation of teacher-training courses. At the same time they are an important element of efforts towards quality assurance and quality development in school education and training. In December 2012 the Standing Conference adapted the framework agreements on training and examination for the different types of teaching careers with a view to the requirements of inclusive education. The aim is to better prepare future teachers to deal with heterogeneity and inclusion and for the requirements of support diagnostics. Courses for the teaching career in special education at universities and equivalent higher education institutions are to be geared to the requirements of inclusive education at all school types. Also in December 2012 the Standing Conference adopted common requirements of the Länder for the preparatory service (the practical placement at schools known as the Referendariat) and the concluding state examination in teacher training (Ländergemeinsame Anforderungen für die Ausgestaltung des Vorbereitungsdienstes und die abschließende Staatsprüfung). The resolution is to take account of more recent developments in the school sector and to further enhance uniformity and mobility in the education system. The focuses of the resolution are:

- structural minimum requirements for the preparatory service
- qualitative requirements for the structure and contents of the preparatory service
- admissions criteria for the preparatory service
- principles for the concluding state examination
- personal responsibility for teaching
- dovetailing the first and second phase of teacher training.

## Equity and Diversity

With the National Integration Plan in 2007, the Federation and the Länder and other integration policy stakeholders committed in their respective spheres of competence to measures to improve the integration of migrants into the education system. The Integration Plan has now been updated. At the 5th Integration Summit in January 2012 the Federal Chancellor presented the National Action Plan on Integration, developed by the Federation and the Länder together with immigrant organisations, the social partners and other civil society stakeholders, and incorporating specific, binding and measurable targets in practically all areas of action with relevance to integration. In this context the Länder are prioritising in particular language support for children and young people, implementation of the Standing Conference's support strategy for poorer-performing pupils (Förderstrategie für leistungsschwächere Schülerinnen und Schüler), cooperation with parents and migrant organisations, and the intercultural opening of day-care centres for children and of schools. The Federation is prioritising the transition from school to in-company vocational training, improving the training success of young people from a migrant background, increasing the share of students from a migrant background, language promotion, and educational research and education reporting.

1 April 2012 saw the entry into force of the Assessment and Recognition of Foreign Professional Qualifications Act (Gesetz zur Verbesserung der Feststellung und Anerkennung im Ausland erworbener Berufsqualifikationen – Berufsqualifikationsfeststellungsgesetz – BFG). The so-called Recognition Act introduces a legal entitlement to an assessment procedure for foreign vocational qualifications in the occupations regulated under Federal law, and extends existing recognition procedures for qualifications obtained in the European Union or the European Economic Area to qualifications obtained in third countries. The question of whether the qualification obtained abroad is equivalent will in future be assessed on the basis of standard criteria in a standardised procedure. This will help to decouple the access to a profession from origin and nationality for the most part. The new standardised and transparent procedure serves to develop the employment potential of migrants and thus improve integration into the labour market and society as well as increase Germany's attractiveness for foreign experts. In February 2012 a working group of members of the Conference of the Ministers of Labour and Social Affairs (Arbeits- und Sozialministerkonferenz), the Conference of Integration Ministers (Integrationsministerkonferenz), the Conference of Ministers of Economics (Wirtschaftsministerkonferenz) and the Standing Conference of the Ministers of Education and Cultural Affairs presented a model regulation coordinated and agreed in the Standing Conference for the Recognition Acts required in the 16 Länder. The model act for an umbrella act of the Länder safeguards uniform legal entitlements, procedures, deadlines and equivalence criteria between the Federation and the Länder, but does not neglect the specific circumstances in the individual Länder. At the same time the Prime Ministers of the Länder have called for the procedures which establish the equivalence of foreign vocational qualifications not to be anchored in the Länder legislation for the individual professions (and thus differently in each Land) but in principle to be implemented on the basis of the Länder

Assessment and Recognition of Foreign Professional Qualifications Acts (Berufsqualifikationsfeststellungsgesetze). Uniform implementation of the Federal rules by the Länder should also be guaranteed. Recent years have seen a growing number of different organisational forms of support in which disabled and non-disabled children learn together in different ways from the elementary sector onwards. In order to ensure children with an existing or an impending disability have an equal role in social life, each child with a disability is to be given the opportunity to attend a day-care centre close to home in which he or she will be supported as well as possible in accordance with his or her individual needs. One option is setting up multiprofessional teams in day-care centres for children e.g. through greater involvement of primary school teachers, motor activity specialists, speech therapists, psychologists and remedial therapists. This will allow each child to be supported in accordance with his or her individual skills, talents and abilities without having to leave their social context or limiting exchange with other children. Since the 1980s disabled pupils have been increasingly integrated into mainstream schools under school pilot projects, some of which have assumed the status of a standard type of schooling since 1990. Also, various forms of cooperation between mainstream schools and special schools have emerged and approaches to inclusive teaching have been developed in educational science. A focus on institutions has given way to a focus on the needs of the individual. Formerly, the prevailing concept when making choices for a child's school career (i.e. the decision in favour of a mainstream school or a special school) was the need for education at a special school. This has since been superseded by the concept of sonderpädagogischer Förderbedarf (special educational needs), meaning education, instruction, therapy and care requirements depending on an individual's individual preconditions as far as the institutional setting allows. This development has been influenced by a new understanding of disabilities and educational needs, improved diagnostic techniques, more effective early detection and prevention as well as better overall conditions at mainstream schools (e.g. improved pupil-teacher ratios), more open approaches to instruction and education and, finally, a greater appreciation of the benefits to children of attending a school close to their home. Within the context of the ratification of the UN Convention on the Rights of Persons with Disabilities by Germany and the equality legislation in the Länder, offers of integration into mainstream schools for pupils with special educational needs are currently being extended. In a position paper of November 2010 on the teaching and legal aspects of the implementation of the UN Convention the Standing Conference found that interaction between general teaching and special teaching is essential to achieving inclusive education. Teachers at all school types are to be trained in the various stages of training in teaching all pupils together. In October 2011 the Standing Conference adopted the decision on inclusive education of children and young people with disabilities in schools (Inklusive Bildung von Kindern und Jugendlichen mit Behinderungen in Schulen). The recommendations are guided by the United Nations Convention on the Rights of the Child and the United Nations Convention on the Rights of Persons with Disabilities. They build on the basic positions of the 1994 Recommendations on Special Needs Education in the Schools of the Federal Republic of Germany (Empfehlungen zur sonderpädagogischen Förderung in den Schulen in der Bundesrepublik Deutschland) and set out the framework conditions for increasingly inclusive educational practice in

general education and vocational schools. The aim of the recommendations is to enable children and young people to be educated and trained together and to guarantee and develop the standards achieved in special education teaching, advisory and support services. This is to stimulate the development of inclusive education programmes. In all planned amendments and developments care must be taken to ensure that

- children and young people with and without a disability can learn in line with their needs and requirements at any place of learning,
- the necessary quality and the required extent of support is provided for all children and young people,
- cooperation is guaranteed between all persons and institutions involved in support,
- special education learning, advisory and support services facilitate high-quality integrative learning.

The above-mentioned Standing Conference's support strategy for poorer-performing pupils (Förderstrategie für leistungsschwächere Schülerinnen und Schüler) is specifically aimed at pupils with special educational needs. It is intended in particular to improve the opportunities for suitable pupils who benefit from the support priority Learning to obtain, in addition to their own specific school leaving certificate, the Hauptschule school leaving certificate. In this context the attendance by pupils with special educational needs of general education schools is being increasingly promoted. Permeability between Förderschulen (special schools) and general education schools is to be improved, for instance by adapting the curricular requirements or introducing English as a subject at special schools. In the higher education sector measures for learners with special requirements include:

- making higher education institutions aware of the specific needs of students in special circumstances, such as for instance students with children, students with disabilities or chronically ill students,
- developing and securing the quality of the advisory and care services for all students, especially for students in particular life situations; student services play an important role here,
- taking the requirements of students in particular life situations more into account in admission, workload and examinations, inter alia in the framework of the accreditation of study courses or the accreditation of higher education systems,
- securing financing for the additional study expenditure incurred by students with a disability by adapting the social law regulations to modern education paths.

## **Enhancing Creativity and Innovation, Including Entrepreneurship, at all Levels of Education and Training**

Partnerships with Business, Research, Civil Society

In the school sector there are partnerships with employment agencies, foundations, companies, trade unions, and other local stakeholders among others promoting vocational guidance at general education schools and Förderschulen (special schools). As part of the qualification initiative for Germany “Getting ahead through education” (Aufstieg durch Bildung) local partnership networks are increasingly being promoted in vocational guidance. As part of the National Pact for Training and Young Skilled Staff in Germany (Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland) initiative ‘career planning is planning for life’ (“Berufswegeplanung ist Lebensplanung”), in order to provide targeted support for young people in their choice of career German industry’s umbrella organisations plan inter alia to

- arrange partnerships with companies for each interested school,
- help young people gain an insight into working practice,
- support mentoring and sponsorship programmes which help, in particular, disadvantaged young people in the transition from school to training,
- support the continuing education of teachers and head teachers through suitable offers from companies.

The Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz –KMK) decided in October 2010 to join the National Pact for Training and Young Skilled Staff in Germany in Germany as a full member. The Länder also concluded complementary regional pacts. These are training networks with a wide variety of regional actors ranging from business and administration to the media and employment agencies. As part of the expansion of work-related study and continuing training courses, higher education institutions are cooperating with the regional economy inter alia. The business sector has on a number of occasions reacted positively to the introduction of the tiered graduation system and, within the context of the “Bachelor Welcome” joint initiative repeatedly expressed the willingness of companies to employ Bachelor’s graduates. The last measure within the framework of the “Bachelor Welcome” project was held in October 2010. More than 80 companies with several million employees have now taken part in the measures.

### **Transversal Key Competences, Entrepreneurship Education, e-Literacy. Media-Literacy, Innovative Learning Environments**

#### **Transversal key competences**

In March 2009 the Standing Conference adopted a resolution on the strengthening of democracy education (Stärkung der Demokratieerziehung). Starting in primary school pupils are to be introduced to the basic principles of the democratic state and social order, and the differences with dictatorial forms of rule. In the secondary sector analysis of 20th-century Germany history is to be intensified as part of multidisciplinary and interdisciplinary teaching in particular. An introduction to the professional and working world is a compulsory component of all courses of education at lower secondary level. The instruction is given either in a separate subject (Arbeitslehre – pre-vocational studies) or as part of the material covered in



other subjects. Work experience placements, especially for pupils in the two last grades at Hauptschule and Realschule, aim to provide first-hand insight into the working world and guidance in choosing an occupation. The Länder have continuously developed their activities in order to convey a basic knowledge of the world of business and commerce. This has also taken place outside of lessons, for example, via model businesses set up by pupils (Schülerfirmen), information about entrepreneurial independence or cooperation projects between the schools and the world of business and commerce. In the higher education sector the Länder support the expansion of work-related study and continuing training courses through target agreements with higher education institutions. New correspondence courses and online study courses, eLearning, eCampus initiatives, distance learning programmes and inter-higher education institution continuing education centres and networks are being promoted to this end among others. These provide, for example as Bachelor's degree courses which lead to a first degree qualifying for entry into a profession, academic expertise, methodological skills, qualifications related to professional fields and key qualifications such as social skills, communicative presentation skills, non-area specific competences and language skills. Competences and learning objectives are also defined with a view to the requirements of the labour market and are checked within the framework of accreditation. General adult education and further vocational training provide, through a diverse network of privately-maintained bodies, further teaching and consolidation of transversal key competences. The innovativeness of educational institutions in the field of general adult education and further vocational education is supported by the Federation and the Länder through the promotion of measures and institutions.

### Media literacy

The report "Kompetenzen in einer digital geprägten Kultur" (competences in a digitally influenced culture), which was drawn up by a commission of experts on media education set up by the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung – BMBF), demonstrated the need to strengthen and promote media literacy as part of a comprehensive media education, and established inter alia that the promotion of media literacy should cover both children and young people and also their adult carers. In March 2012 the Standing Conference adopted a resolution on media education in schools which aims to progressively anchor media education as a compulsory part of school education and provide schools and teachers with guidelines on media education in training and teaching. At the same time it highlights the possibilities arising through the didactic and methodological use of new media to shape teaching and learning processes. Media education in schools aims to help pupils acquire and develop media literacy, i.e. the knowledge, abilities and skills which allow appropriate, autonomous, creative and socially responsible behaviour in a world which is heavily influenced by the media. The declaration "Medienbildung in der Schule" (Media Education in Schools) explains the position of media education in schools using examples in five dimensions which concern:

- promoting the quality of teaching and learning through media



- the opportunities for social and cultural participation and involvement
- shaping the identity and personality of young people
- developing attitudes and value systems, and aesthetic discernment
- the necessary protection from the negative impacts of the media and media use.

To substantially promote media education in schools, the Standing Conference designates specific fields of action in the resolution, inter alia curricula and educational plans, teacher training, equipment and technical support, data protection and cooperation with partners outside of school. In vocational education and training the study “Bestandsaufnahme zur Medienkompetenz in Förderprojekten des BMBF” (survey on media literacy in BMBF funding projects) also highlighted the importance of media literacy for vocational education and training. Connected with this, with the BMBF funding announcement “Stärkung der digitalen Medienkompetenz für eine zukunftsorientierte Medienbildung in der beruflichen Qualifizierung” (strengthening digital literacy for future-oriented media education in vocational qualification), since autumn 2012 the anchoring of media education in the different stages of vocational education and training (initial, further and continuing training) is being promoted through a total of 10 network projects (33 individual projects).

### **Specific Ongoing Reforms and Policy Developments at National Level**

Measures to develop and safeguard the quality of school education remain at the heart of education policy debate. In this process particular consideration is given to the results of the national and international comparisons of school performance as well as the comparative tests carried out across all Länder (VERA 3 and VERA 8). Great importance is attached in this process to the nationally applicable education standards as a reference framework for quality assurance and development at all system levels in the school sector. There is a consensus that, in light of demographic changes in Germany, and with a view to the emerging need for skilled workers, great efforts must be made to develop the German education system in the years ahead. This is especially true of the interfaces between early-childhood education, school, vocational education and training and higher education. Against this background, in October 2008 the Federation and the Länder agreed a common catalogue of objectives and measures in the Dresden declaration Getting ahead through education – The Qualification Initiative for Germany, which addresses all areas of education from early-childhood education through to continuing vocational training:

- education is to have top priority in Germany
- every child should have the best possible starting conditions
- everyone should be able to gain school-leaving and vocational qualifications
- everyone should have the opportunity to get ahead through education
- more young people should take a degree course
- more people should be filled with enthusiasm for scientific and technical vocations
- more people should take advantage of the opportunity for continuing education

Within the scope of the Qualification Initiative the Federal Government and the Länder aim to halve the number of adolescents leaving without vocational qualifications from a national average of 8 per cent to 4 per cent and of young adults without vocational qualifications who are capable of undergoing training from 17 per cent to 8.5 per cent by the year 2015. Furthermore it is the joint aim of the Federation and the Länder to increase the percentage of new students to a national average of 40 per cent of a year group. To promote the dovetailing of the different education sectors and to establish the prerequisites for successful educational biographies, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung – BMBF) together with German foundations launched the initiative “Lernen vor Ort” (learning locally). At present this is helping 35 districts (Kreise) and municipalities with the status of a district (kreisfreie Städte) to develop integrated education management which coordinates the existing education offers at all levels with one another. To this end new forms of local control and cooperation in the education system are being created which cover all education sectors and dovetail with one another in such a way that people are provided with demand-oriented and efficient education opportunities. The funding initiative approach of addressing the structures of local or regional education systems, coupled with the introduction of systematic education monitoring in the participating local authorities, has also led to new incentives in the local landscape, as shown by the November 2012 “Münchener Erklärung” (Munich Declaration) of the German Association of Cities (Deutscher Städtetag). The results of the funding initiative are therefore to be made available to all interested local authorities (Kommunen) across Germany from 2014.

## 6. Greece

### 6.1 National context

#### Population, economic and social characteristics

At the beginning of the 2009/10 school year in public and in private compulsory education (primary and lower-secondary school levels) there were enrolled 1 051 297 and 75 828 students correspondingly. More generally, in January 1, 2009 the estimated population aged 0 to 29 years numbered 3 638 2000 individuals comprising 32.3 % of the total population. The language of instruction at all levels of education is Greek. Concerning this Muslim community, there are minority schools in which the teaching of courses takes place in both the Greek and the Turkish language.

Description of the types of education and training (formal and informal) that occur in a country

#### Pre-primary education

Children aged 4 years may attend public or private kindergartens (nipiagogeia). Kindergarten attendance is compulsory for all 5 year olds; it remains optional, however, for four year olds. Public state-run kindergartens do not charge any fees. Parents pay full tuition fees for their child to attend private kindergartens. Children enrol in nipiagogeia according to the family's place of residence. Administratively, nipiagogeia are considered part of primary education. They follow national curricula for the kindergarten level that have been developed by the Pedagogical Institute. The maximum class size is limited to 25 pupils. The pupils have a 9 month school year (11 Sept. to 15 June) and a daily program lasting from 8:15 to 12:15; unless they attend all day kindergartens (Oloimera Nipiagogeia) where children may arrive as early as 7:00 and leave as late as 16:00. Nipiagogeia operate from 1st of September till 21st of June. Education and care for children 4 years of age and under is provided at child centres (paidikoi stathmoi) and at 'infant' centres (vrefonipiakoi stathmoi) – the latter from 6 months of age – that are municipal, i.e. public, or private. Attendance is optional for this age group. Municipal/community child centres are run by the local municipalities and communities. Parents pay a small fee for these child centres, though fees can be waived for certain categories of families. Private child centres charge full fees. During the 2009/10 school year, there were 146 250 youngsters enrolled in public kindergartens and 11 658 in private ones. Of children attending public kindergartens, 36.3 % were 4 years old and 51.2 % boys. In private kindergartens, 21.7 % of the pupils were 4 years old and 47.8 % girls.

#### Compulsory education

#### (i) Phases

Education is compulsory for the age cohort 5-15 years and is divided into the following levels: There are also 3 years of lower secondary education provided by Evening Gymnasias (Esperina Gymnasias) that are geared to the needs of working students and enrol students from the age of 14 years. In addition operate Ecclesiastic, Minority, Cross-Cultural, Peiramatika (Experimental), Music, Special Education Gymnasias etc.

#### (ii) Admissions criteria

Granted a kindergarten certificate, enrolment in public primary education is based solely on the pupil's place of residence. The same rule applies to the lower secondary school level, with the prerequisite that the student has obtained a school-leaving certificate from primary school. Education in Greece for all levels of public education is provided free of charge and all costs (transportation, books etc.) are covered by the state budget. Families may choose to enrol their children in private schools where full tuition fees are charged. Increases in school tuition fees by private schools are negotiated with the General Secretariat for Commerce.

#### (iii) Length of school day/week/year

The school year is comprised of 175 days from the 11th of September to the 15th of June for primary schools and the 31st of May for lower secondary schools. Schools are open five days a week for 35 weeks per year. Instructional hours per week are from 23 to 35 depending on the grade or level. Each instructional hour lasts from 40 to 50 minutes. The number of instructional hours for the two first grades of primary education is 25 per week, reaching 30 hours in the next four grades and 35 hours for all three grades of lower secondary education.

#### (iv) Class size/student grouping

According to Ministerial Decisions, primary classes may have up to a maximum of 25 students; at the secondary education level, classes may have up to 30 students. Students are grouped by age, thus creating six grade levels in primary education and three in secondary. All schools are mixed gender. Primary classes have one teacher for all subjects, with the exception of physical education, foreign languages and music which are taught by subject specific teachers. Secondary education students have different teachers for each subject.

#### (v) Curriculum control and content

The national curricula for primary and secondary education are developed by the Pedagogical Institute and approved by the ministry. The current Cross-Thematic Curricular Framework for compulsory education and accompanying subject syllabi reflect a more inter-disciplinary approach to knowledge. At the primary school level the national curriculum covers religion, Greek language, mathematics, history,

environmental studies, geography, science, social and civic studies, arts studies (music et al.), two foreign languages and physical education. The program also includes a 'Flexible Zone' for the development of cross-curricular themes and creative activities.

The above subjects, except for environmental studies, are included in the lower secondary school curriculum which also covers ancient Greek, chemistry, biology, information and computer technology, home economics, technology and school vocational guidance. Teachers are required to follow the national curriculum and to use the approved textbook for each subject; taking into account, however, the particular needs and features of their classes as far as teaching methods are concerned. At the beginning of each school year, the Pedagogical Institute issues directions for teachers on teaching approaches and aims according to subject area. The school textbooks, written according to the criteria set in Cross-Thematic Curricular Framework, are evaluated by the Pedagogical Institute and recommended to the ministry of Education for final approval.

#### (vi) Assessment, progression and qualifications

At the primary school level, students are assessed by their teachers throughout the school year. Periodical and annual assessments are descriptive and also include letter grades from the third year of primary school. Students are generally promoted to the next grade, except in cases of insufficient attendance. In the rare case where a student might need to repeat a grade – based on teacher assessment – a strict process of consultation precedes this outcome. Students completing the sixth grade (end of primary school) receive the primary school leaving certificate (Apolytirio Dimotikou) which serves for admission to lower secondary school (Gymnasio). In lower secondary schools teachers assess students based on daily work, written tests, assignments and end-of-year written review examinations, Graptes Anakefalaiotikes Exetaseis. Promotion is based on achievement. Students who achieve an overall passing grade, at the end of the third year of lower secondary school receive a school-leaving certificate (Apolytirio Gymnasiou), which grants access to senior high school.

### **Post-compulsory education/upper secondary and post-secondary level**

#### i) Types of education

Lyceums (Lykeia) offer a three year course and are of two types: the Geniko Lykeio (G.L.) that provides general/academic studies and the Epangelmatiko Lykeio (EPA.L.) that combines general education with technical-vocational studies. In 2007/08 of all first and second year Lykeio students, 23 % enrolled in vocational Lykeia and 77 % in general Lykeia. There are also evening lyceums (Esperino Geniko Lykeio and Esperino Epangelmatiko Lykeio) that offer a 4 year part-time course (15-19 years of age) and in 2007/08 enrolled about 5 % of Lykeio students. The Epangelmatikes Scholes (EPA.S.) offer a two-year course organized according

to occupational area, which may extend to three years if on-the-job training is provided. Other Ministries besides the ministry of Education also operate such vocational training schools providing courses in their area of responsibility. The post-secondary Instituta Epangelmatikis Katartisis (I.E.K.) offer 4 semesters of initial vocational training, or in the case of vocational education graduates who followed a similar course, 2 semesters of further training. Certain courses of the I.E.K. can also enrol Gymnasio graduates. Currently there are 114 public I.E.K. (no fees) and 53 private I.E.K. (fee paying).

At the same time, private institutions offering services at post-secondary level ('Post-secondary Education Centres') are classified as belonging in the informal post-secondary education and training realm according to the relevant Law 3848/2010. For their establishment and operation, licenses are required that are granted by the ministry of Education Lifelong Learning and Religious Affairs while the study or other certificates they provide are not academically equal to those granted within the framework of the Greek post-secondary system of formal education, (e.g. Universities, Technological Education Institutes and the above mentioned I.E.K). The provisions governing the establishment and operation of "Post-secondary Education Centres" are stipulated in Law 3696/2008 and 3848/2010. The abovementioned laws provide ground for Laboratories of Liberal Studies which offer non-typical vocational studies of a shorter period.

#### (ii) Admissions criteria

Holders of a lower secondary school-leaving certificate (Apolytirio Gymnasiou) may enrol in a Geniko or an Epangelmatiko Lykeio according to catchment area. Students who have successfully completed the entry year of Lykeio may then enrol in the first year of Epangelmatikes Scholes (EPA.S.); while Epangelmatiko Lykeio students can also opt to enrol in a school outside their catchment area when it offers a special field they are interested in. Students are also able to transfer between Geniko and Epangelmatiko Lykeio at the beginning of year two. Graduates of any type of post-compulsory secondary school, including vocational training schools, may enrol in the post-secondary Instituta Epangelmatikis Katartisis (IEK). Adult graduates of compulsory education may also enrol in an IEK, but only for certain courses.

#### (iii) Curriculum control and content

The Pedagogical Institute sets national curricula for all upper secondary schools. The curriculum for the Geniko Lykeio includes general education subjects (modern and ancient Greek language and literature, history, mathematics, sciences, religion, a foreign language, technology, social sciences, physical education) as well as electives and specialization subjects from year two which depend on the 'stream' followed (theoretic, scientific, technological). The curriculum of the Epangelmatiko Lykeio includes general education subjects similar to the above, as well as technical – vocational subjects that vary according to stream followed (technological, service, and maritime). EPA.S. (Vocational School) curricula include technical – vocational



subjects and workshop courses. Class size in vocational education is limited to 25 students.

The curricula of the Instituta Epangelmatikis Katartisis (IEK) include both theoretical and practical components and emphasize new methods and skills that broaden the occupational options of adult students. Course offerings are the result of an ongoing process of consultation with social partners and are based on the recommendations of the Tri-party Consultative Committees of OEEK (the Organisation for Vocational Education and Training), comprised of representatives of OEEK, employers and employees, that consider regional labour market needs and trends.

#### (iv) Assessment, progression and qualifications

Geniko and Epangelmatiko Lykeio students are assessed by teachers on the basis of their participation in daily classroom work, their performance on tests and on end of the year final examinations. To be promoted and to receive a Lyceum Diploma (Apolytirio Lykeiou), an average general mark of 9.5 out of 20 is required. Besides the Lyceum Diploma, a prerequisite for admission to tertiary education is achievement score on the 'Certificate' (Vevaiosi) which includes grades in six general education and 'stream' subjects that are examined at the national level. The general achievement score on this Certificate takes into account final year school grade, school level evaluation and grades on the six subjects of the national level examinations. Epangelmatiko Lykeio graduates acquire, in addition to the above, a level 3 vocational education certificate (Ptychio Epangelmatikis Ekpaidefsis, epipedou 3) based on school level examinations. Assessment for promotion and graduation from the Epangelmatikes Scholes is conducted at the school level, and upon successful completion of their course, students receive a level 3 vocational education certificate (Ptychio as above), which in addition to employment, allows them to enrol in post secondary IEK. Trainees at IEK (Post Secondary non-Tertiary Education) are assessed by their instructors during and upon completion of their training. Students who successfully complete an IEK course are awarded an Attestation of Training (Vevaiosi Epangelmatikis Katartisis) and then participate in external examinations conducted by the competent national or local committees to obtain a postsecondary level Diploma of Vocational Training (Diploma Epangelmatikis Katartisis, epipedou metadeuterothmias epangelmatikis katartisis).

#### Practices and organisations

Pre-primary and primary school teachers are degree (Ptychio) holders from a four-year university-level course, primarily from Pedagogic Schools. Lower and upper secondary education teachers hold university degrees, Ptychia, in their specialist subject after completing a four-year course and take a three-month introductory teacher training course upon appointment. Access to teaching posts in the state sector (pre-primary to secondary level) is determined by competitive examinations administered by Supreme Council for Civil Personnel Selection (ASEP). Teachers at all levels of the state sector are civil servants.

## Initial Training of Teachers

The initial training of pre-primary, primary, secondary education teachers lasts 4 years for all specialities. As for the teachers of Music, the duration of studies is fixed at 5 years in the Department of Music Studies at the Universities or around 9-10 years at musical academies for music teachers.

As for Special Education, primary education teachers receive 4-year basic training in the Pedagogical Department of Primary Education and Pre-primary Education Teachers at Volos, specialising in Special Education, or in the department of educational and social policy at the University of Macedonia with specialisation in disabled persons. Teachers having acquired a postgraduate degree in school psychology are employed as educational staff of special education schools and integration departments.

## Pre-primary Level of Education

The state's first concern about pre-primary Education was first manifested back in the late 19th century, when private citizens acquired the right to establish Pre-primary institutions, after securing a permit from the Ministry of Education. In 1956, one-class pre-primary institutions' teachers' courses were established at the Pedagogical Academies and operated for four years. Furthermore, following the establishment of the Pedagogical Departments at Universities in 1982, the said departments for Pre-primary teachers at the respective Universities undertook to provide university education to future Pre-primary teachers.

## Primary Level of Education

The first institution (Didaskaleio) to train candidate teachers and initiate them into the "mutual teaching" (allilodidaskalia) method was founded in Argos in 1824. Later on, similar teachers' academies were founded in other towns and the duration of studies became three years. Subsequently, the teachers' academies were abolished and two-year, post-secondary teacher training was instituted at the Pedagogical Academies. Nowadays, by Law 1268/82, pedagogical departments for primary education have been established with four-year programmes in all Greek Universities.

## Secondary Level of Education

After the establishment of the University of Athens (1837) and the National Technical University (1914) and up to the present day, the basic training of secondary school teachers in the departments related to their fields lasts for four or five years. In this overview of the evolution of the basic training of secondary school teachers, it is worth mentioning that, for the first time in 1897, a Chair of Pedagogy was established at the University of Athens as a form of positive response by the University to the views prevailing at the end of the 19th century that special preparatory training had to be provided to those who were going into the teaching profession.

The education of teachers for Technical and Vocational secondary school education was systematised for the first time in 1959 with the establishment of the School for Technical Education Teachers, which –after subsequent regulations– offered two kinds of education programmes: four-year studies of higher level education (Engineering and Technology Teachers’ Institute) and one-year pedagogical training (Technical Pedagogy School).

In 2002 School for Technical Education Teachers was abolished and the Higher School for Teachers of Technological Education, was established, which belongs together with the Technological Vocational Educational Institutions in the Technological Branch of Higher Education.

### Debates and Developments

The need to train all primary and secondary education teachers in pedagogy and teaching regardless of their specialisation is an issue being considered by the Ministry of Education, Lifelong Learning and Religious Affairs and related bodies. In addition to theoretical training – teachers must also:

- Keep abreast of developments in specific scientific, pedagogical, technological, social, political economic fields directly related to their work.
- Attempt to obtain the necessary methodological tools enabling a better understanding and critical approach to developments that will result in conscious choices, better organisation and greater efficiency in handling their teaching work.
- Be informed on matters pertaining to school life, such as: Organisation and administration of a school unit, dynamics, problems and management of the student community, management of problematic situations, multicultural issues, etc.
- Be well versed in the use of New Information and Communication Technology. This can be accomplished by attending relevant EU programmes, developing counselling services/mechanisms in the school unit, etc.
- Be trained to teach in a cross-cultural school setting.
- Be trained to act as a mediator in conflict situations at school
- Be aware of issues related to lifelong learning and continuous education in their field.
- In particular, teachers in Secondary Technological and Vocational Education should refresh their pedagogical and technical knowledge, as imposed by swift developments in technology and the changes these entail in the labour market.

In order to achieve these goals and to assist in teaching generally, the Ministry of Education has adopted actions, such as ‘Comenius 2’ in the framework of the Lifelong Learning Programme (2007 – 2013). This comprises the following actions: a) European collaboration plans for training school teaching staff and b) personal mobility – training activities. In the first case, the sine qua non condition for the approval of such partnerships is the participation of an institution involved in initial or

even in-service training of teachers, with registered offices in one of three countries. This enables educators to have access to further training in each school year.

## **Institutions for Teachers' Training**

### **Institutions for Training pre-primary Teachers**

Training for teachers in pre-school education is provided by the Pedagogical Departments for Pre-primary Teachers, which have been established at the Universities of Athens, Thessaloniki, Patras, Ioannina, Thrace, Crete, the Aegean, Thessaly, and at the Department for Pre-primary Teachers of the University of Western Macedonia in Florina.

### **Institutions for Training Primary Education Teachers**

Training for primary school teachers is provided by the Pedagogical Departments for Primary Education which have been set up at the Universities of Athens, Thessaloniki, Patras, Ioannina, Thrace, Crete, the Aegean, Thessaly, and at the Pedagogical Department of the University of Western Macedonia in Florina.

### **Institutions for Training Secondary Education Teachers**

A candidate secondary school teacher pursues his/her basic studies in his/her own subject fields and receives his/her pedagogical training in the following educational institutions:

- At University for the following fields: Theology, Greek Language and Literature, Mathematics, Physics, Chemistry, Natural History, Biology, Geology, French Language, English Language, German Language, Art Subjects, Economics, Sociology, Physical Education, Civil Engineering, Architecture, Surveying, Mechanical Engineering, Electronic Engineering, Electrical Engineering, Nautical Engineering, Chemical Engineering, Metallurgy, Chemical Metallurgy, Radio-Electricity Physics, Computer Science, Law and Political Science, Medicine, Dentistry, Pharmacology, Agronomy, Forestry and Natural Environment, Nursing, Home Economics, Music, Theatrical Studies, Methodology, History and Theory of Science.
- At the Higher School for Teachers of Technological Education ( ) a) for teachers of Electricians, Mechanics, Electronics, Infrastructure Civil Works and of Civil Building Works, b) offering one-year pedagogical training to graduates of various specializations of Higher and Technological Education (paragraphs 1 and 3) who wish to be appointed as teachers in the Technical and Vocational education.
- At Technological Education Institutes for the fields Graphic Arts, Business Administration, Accounting, Medical Laboratory, Dental technician, Assistant Social Worker, Nursing, Plant Production, Animal Production, Fish Farming-Fishery, Farm Machinery, Forestry, Farm Management, Vehicles, Textiles, Radiology, Occupational Therapy, Physical Therapy, Graphic Design, Interior

Design, Conservation of Antiquities and Works of Art, Photography, Green House Cultivation and Floriculture, Infant Care.

- At the Vocational Lyceums, the Vocational Schools, the former Technical Vocational Upper Secondary Schools or the former Technical and Vocational Schools or from the Secondary Education Department of the Technical Pedagogy School there are teachers there are teachers teaching subjects of a technical or workshop nature. Such specialisations include: Drafting, mechanical engineering technicians, automobile mechanics, refrigeration mechanics, construction technicians, electricians, electronics technicians, chemistry laboratory technicians, merchant navy mechanics, office employees, accounts office employees, interior design, computer operators, cutting-sewing, hair-dressing, mineralogists, clock-makers, silver- and goldsmiths, dental technicians, textiles, aircraft fitters, medical assistants and biology laboratory technicians., electrical technicians, mechanical technicians, electronics technicians, builders, practical mechanics, practical electricians, welders, chemist's assistants, motor-mechanics, refrigeration mechanics, plumbers, carpenters, cutters-sewers.

Students are taught through a combination of methods, including lectures, tutorials, practice teaching, assignments of projects and in any other ways selected by the faculty member who notifies the students accordingly.

## 6.2 Policy environment

### Ongoing reforms and policy initiatives

Ongoing reforms and policy initiatives related to 'ET 2020' strategic framework  
Making lifelong learning and mobility a reality

### Lifelong learning strategies

As part of an effort focusing on citizen's needs aiming at decreasing social inequalities by overcoming educational deadlocks, a new law 3879/2010 on lifelong learning has been in force since September 2010. It is titled "Development of Lifelong Learning and other provisions" and its goal is the development of lifelong learning via alternative educational paths as well as the association of lifelong learning bodies with those of quality assurance so as to successfully connect lifelong learning with occupation and to provide these type of education beyond the formal educational system. This specific framework has clear principles setting up qualitative and quantitative realistic targets as well as establishing specific political proposals for carrying out these targets. It also responds to the current needs of changing the educational model and of focusing the state's interest on student's benefit. European Qualifications Framework

The ministry of Education Lifelong Learning and Religious Affairs in 2010, as part of its new policy on lifelong learning, proposed the establishment of the National Qualifications Framework in accordance to the European Qualifications Framework.



This effort was developed because to date there was not any unified system as to qualification recognition and accreditation including all types of education, training and professional experience. The goal of organizing a unified National Qualifications Framework is the association, recognition and accreditation of all types and levels of formal, informal and non-formal learning on the basis of an agreement certifying quality and mutual trust between the state and social partners. In this context, the National Qualifications Framework will enable transparency in vocational qualification, it will facilitate access and progress in lifelong learning processes and it will support in a better way the relationship between education/training and employment. The planning and establishment of National Qualifications Framework will take into account from the beginning all social bodies contributing in any way in education and training in Greece: accreditation bodies, agencies for recognition of academic titles and professional qualification, quality assurance bodies, social partners and of course the citizens. The creation of a National Qualifications Framework was completed within 2010. The public consultation on NQF started in the beginning of March and ended in the beginning of September 2010 and the law 3879/2010 established it.

### **Improving the quality and efficiency of education and training** Language learning

The improvement of state foreign language education is carried out in cooperation with the National and Kapodistrian University of Athens with a goal of forming a single comprehensive plan and of designing the necessary studies. A new study program will be formed for all modern languages included in the curriculum. It will abide by the rules of the Common European Framework of Reference (CEFR) for language learning of the Council of Europe (CoE), which sets a six grade scale of assessment and has been adopted by the State Language Certification. Therefore, this programme will point out what is needed of every Greek user of a foreign language at every level – from A1 (breakthrough) to C2 (mastery). From September 2010, the pilot English language programme will begin in 60 primary education schools (Dimotika) and 30 lower secondary education schools (Gymnasia) in different prefectures of the country. The proposition is graduation from primary schools to lead to an A2 or a B1 certification and graduation from lower secondary education schools to a B2 certification.

### **Professional development of teachers and trainers**

Aiming at completing the program within three years time, the ministry of Education starts the in-service training of all teachers in September 2010. This process will try to take advantage of the progress of Information and Communication Technologies. The in-service training focuses on: a) discipline, b) teaching methods, c) new technologies and d) the guidance and administrative staff of education. The training programs comprise: a) a basic seminar, b) distance learning and c) a feedback seminar. The duration of in-service training will be 200 hours, of which 50 hours are viva voce and 150 are distance learning. The process will be specialized and bound to the forthcoming changes of the curricula which teachers are called to implement

but also to contribute to form their final content. Respectively, there will be training in relation to the educational practices accompanying those programs. This training will commence at least six months before the pilot implementation of the new curricula and according to the rate the latter are effectuated. The ongoing process of improving the staff involved to education comprises a change in the selection of the administrative staff of education. The equal access of teachers in the selection process for such posts as well as the widening of the basis of candidates is attempted through law 3848/2010. Selection process takes into account knowledge and competences acquired via professional experience. Training with the contribution of the National Centre for Public Administration and Local Government (E.K.D.D.A.) in issues connected to administration of education is also obligatory. The formation of a framework of the administrative staff professional progress is served by the same law. Prerequisite of selection will be the participation in self-evaluation programmes and, at a second stage, in evaluation programmes. Except from the aforementioned law, a public consultation took place in June 2010 as part of a national teacher's in-service training strategy.

#### Basic skills in reading, mathematics and science

Through the new approach to the operation of primary and secondary education, the ministry of Education encourages the Pupil: a) to acquire better competence in speaking and writing the Greek language b) to get in touch with literature, theatre, music, history and, in general, culture c) to have a cognitive efficiency in the handling of mathematic concepts applied to everyday life d) to develop mathematic logic and abstractive ability e) To acquire respective knowledge and skills in sciences and in technology. Starting from the current school year, changes in the curricula and in the teaching methods as well as relative training of teachers aim at reaching these goals.

#### 'New Skills for New Jobs'

Actions taking into account labour market skills needs in education in Greece have been taken by the National Accreditation Centre for Continuing Vocational Training (EKEPIS), the Greek Manpower Employment Organisation (OAED) and the Organisation for Vocational Education and Training (OEEK). These organisations, by using the Greek education and training system for developing new competences, respond to the labour market needs.

#### 'Making lifelong learning and mobility a reality'.

### **Promoting equity, social cohesion and active citizenship**

#### Pre-primary education

Concerning social cohesion law 3518/2006 safeguards access to pre-school education even from the age of 4 years old for all children irrespectively of national, socio-economic or religious background of their families. From 1997, law 2525

established the All-Day pre-primary schools for serving working parents with their children.

#### Learners with special needs

In the field of special needs education, the basic principles of the ministry of Education policy aim at social integration of the disabled pupils and are as follows: No child with disability or special educational needs will face problems in enjoying the benefits of education. For this reason, all disabled pupils or pupils with special educational needs are monitored. They acquire 'pupil identification number' and are integral part of pupil population in a school. Constitution of a special committee for the harmonization of the Greek educational legislation with the UN convention on the Rights of Persons with Disabilities (December 2006) as well as the Greek Constitution in order to move towards the elimination of discrimination and social exclusion.

Use of all staff specialists in this field in order to respond to the growing demand for special needs education teachers. Forwarding physical accessibility and e-accessibility by developing specialized educational material. Establishment of proficiency certification procedure for blind and deaf children in Greek sign language and the creation of a certification mechanism of the Braille system. Mapping, monitoring and evaluation of special needs education. The qualitative and quantitative mapping is the base for the systematic monitoring and evaluation of all educational actions and structures. Establishment of the annual 'preparation and publication report of conclusions' following the appropriate methodology. The report will refer to the situation in special needs education with measurable evaluation of policies and measures implemented.

#### Innovation-friendly institutions

The pilot program of the School Network on Educational Innovation was applied in the 2010-2011 school year with innovative educational practices as part of the positive distinction logic. The innovative practices fight social inequalities by helping to reduce inequalities in educational outcomes and by improving general educational level. The system first will be applied for a year to schools of three regions and, after evaluation, to schools of 10 regions until 2013. In parallel, the educational support to vulnerable social groups will be carried out directly through three specific programmes (after public consultation a notice of competition has been already released): a) education of the Muslim minority in Thrace children; b) education of foreign and repatriated children and c) education of Roma children.

### **Other important ongoing reforms and policy initiatives at national level School Education**

#### All-day primary schools plan

Gradually, all primary education schools are becoming all-day schools with a unified educational program. Pupils in those schools will attend foreign language classes leading to certification, they will do sports and they will become familiar with the arts or other creative activities. Study (single or collective) in the first grades, takes place within the working hours of the school. For the 2010 – 2011 school year a plan for direct interventions is forwarded. The details of the plan refer to:

- The reduction of the educational contents,
- The expansion of the compulsory working hours,
- The focus on Greek language and on mathematics,
- The aiming at foreign languages,
- The priority to ICT and
- The augmentation of hours for teaching culture and literature.

#### The 'new school' plan

The ministry of Education Lifelong Learning and Religious Affairs seeking to confront problems related to the operation of schools and to the education offered to pupils suggests measures according to the 'pupil first' principle. Yet, it does not ignore other parties involved in the education system. The Ministry having incorporated the European Commission priorities on the Improvement of Competences for the 21st century (July 2008), and having taken into account the Primary and Secondary Education Council conclusions (November 2009) as well as the evaluation studies conducted by the Pedagogical Institute aims at creating 'the new school', so that new generations to be able to:

- Firmly step upon values and principles,
- Continue their effort to learn throughout their lives,
- Participate successfully in economic life and to have opportunities to upward social mobility,
- Act as responsible citizens and
- Be active citizens.

Within the 'new school' the common in the European Union strategic educational objectives will be served: a) development of lifelong learning, b) education quality improvement, c) social cohesion and active citizenship and d) innovation, creativity and entrepreneurship. The priorities previously described regarding lifelong learning, all-day primary education schools, use of ICT in in-service training of teachers, the enhancement of educational administrative staff role, the improvement of pupils' competence in the Greek language, the foreign languages pupils are taught and special needs education are parts of the reform taking place for the constitution of 'the new school'

On the basis of the aforementioned, teachers, pupils, parents and citizens were informed of the principles, the framework and the initial propositions on this issue. After public consultation in May 2010 the law 3848/2010 was ratified by the Greek Parliament regulating issues of 'the new school', and other wider educational issues

concerning: a) The process of teacher appointment (proceeding of the competition, appointment in the new posts) whether the case of permanent staff or part-time staff, in both state and private education. b) The selection of other primary and secondary education staff such as School Advisors, heads of the Directorates of Education (Prefecture) and of the Education Offices (Province), the School Principals (prerequisites and selection criteria) and the councils choosing the specific staff. c) Issues of official alterations (transfers, detachments, transferences) and of teacher evaluation. d) The modernization of the university sector institutes of higher education including the selection of the instructional personnel, the distribution of books, access to higher education, research and so on. It also regulates issues of 'Quality Assurance Agency in Higher Education' (ADIP). e) Religious education (ecclesiastic schools of lower and upper secondary education) and its staff. f) Finally, the Post-secondary Education Centres (former Colleges) and the General Secretariat for Research and Technology (the latter since the end of 2009 has been affiliated by the ministry of Education).

## Higher Education

Wide reforms take place regarding higher education and the Bologna Process. Law 3794/2009 harmonized the operation of the university and technological sectors of higher education and put at the same level Universities and Technological Education Institutions (TEIs).

## Youth

In 2010 the General Secretariat for Youth via the programme "Support of Initiatives for Youth 2010" attempts to support actions, programs and initiatives for youngsters, based on three thematic priorities: a) labour relations, employment, combat of unemployment, b) social integration – combat of social exclusion and c) environmental awareness, green growth, climate change, environment.

## Research and technology

A major reform in the research area is ongoing in Greece. It is commonly accepted that the increase of the outlay on scientific research is the necessary prerequisite for the improvement of Greece's international competitiveness. For this reason and by taking into account the EUROPE 2020 strategy, the action plan for research in Greece sets the objective of 2 % until 2020 for the expenses for research and technological development, that is the tripling of the expenditure for research as a percentage of GNP approved until now. An action plan for the enhancement of research, technological development and innovation has been submitted in public consultation by the Greek Ministry of Education, Lifelong Learning and Religious Affairs in the official site of the Greek government. The objective of the action plan is towards a new architecture of the Greek system of research and towards the unification of the research area, which is now cut up, as mentioned above, in various scientific areas.



The newly elaborated National Strategic Framework for Research and Innovation (2010-2015) constitutes a turning point of the reform of the legislative framework of research in Greece and will have the form of a Programme-Framework for Research, comprising 5 different axes, research funding included. The so-called axes are the following: i) axe of targeted scientific/research works ii) axe of direct support of the innovation iii) axe of unified research area iv) axe of research infrastructure v) axe of research work staff.

### 6.3 Past and current initiatives and projects in Schools

#### "OEPEK"

The Organisation for the training of teachers is supervised and directed by the Ministry of Education. It is the national body responsible for designing and implementing the «official» training programmes for teachers of all levels of the greek education system.

#### "Program for School Innovation"

The main goal of the PfSI is to provide training and support to K-9 teachers and schools in order for them to establish those conditions which favor sustainable educational innovation within the school environment. The PfSI addresses many aspects of school education and introduces a state-of-the-art pedagogical approach to instructional, competence-based design and assessment, deploying the Key Competencies (the new literacies) agenda, while it proposes action on two tracks: the school development and the teacher professional development.

#### "Hellenic theatre/drama and education network (TENet-GR)"

TENet's dual aim is to provide assistance for the performing arts in order that they can gain a central role in schools, and to contribute to the development of approaches and techniques, viewing theatre both as an art form and a learning tool. TENet-Gr is an "open platform" for exchanging different ideas on theatre/drama and education. TENet-Gr is a registered non-profit organization and operates as an association of teachers and artists. TENet-Gr is ordinary member of IDEA-International Drama/Theatre & Education Association. TENet-Gr supports and constantly updates its web page, [www.TheatroEdu.gr](http://www.TheatroEdu.gr) with a plethora of educational material (news bulletin, e-journal, listings of theatre exercises and games, brief descriptions and analyses of theatre plays, e.t.c.).

#### "Hellenic Children's Museum"

The Hellenic Children's Museum, whose creative journey spans some 20 years, aims to encourage every child to discover, comprehend, learn, be happy and shape their self and the world which surrounds them with respect for individuality and emphasis on cooperation. It is the country's only multi-thematic, interactive museum specially designed for children. The Children's Museum is oriented to children up to 12 years

of age, parents, educators and anyone else interested in learning. The Children's Museum's central philosophy is based on the belief that real objects, actual experiences and recreation support and reinforce the learning procedure. The exhibits are specially designed to meet the needs and capabilities of children. Three-dimensional structures enable children to use all five senses in discovering elements of the world around them. The themes of exhibits are derived from children's interests, their day-to-day life and the needs of their educators. Through their interaction with exhibits at the Hellenic Children's Museum, children acquire knowledge of their natural, man-made and social environment, while improving their skills and establishing their personality. Examples of exhibit themes at the Children's Museum include "Loft", "The Deep", "Kitchen" and "Shadows". The museum receives some 50,000 children each year, whereas the various functions it has developed (external activities, seminars, museum items) enable it to come into contact with around 120,000 children and adults in total. The Children's Museum is a member of the International Council of Museums (ICOM) and the Hands On! Europe Association of Children's Museums.

## 7. Italy

### 7.1 National context

#### Population, economic and social characteristics

The Italian territory, with the exclusion of Republic of San Marino and Vatican City State, covers an area of 301 336 square km. Italy's population is 60.820.800 (Eurostat, 2012). Foreigners regularly residing in Italy were 4 570 317 (7.5% of the resident population), reference year 2010. The majority of foreign citizens comes from EU countries (29.2%), whereas the highest number of migrants, who come from non-European countries, are from northern Africa (14.9%) (Istat, 2011).

Description of the types of education and training (formal and informal) that occur in a country

#### General information

The Ministry of Education, University and Research (MIUR) is responsible for the general administration at national level. As for school education, at the decentralised level the MIUR works through the Regional School Offices (Uffici Scolastici Regionali, USR), which are organised at provincial level in the Local Offices (Ambiti territoriali). Complimentary to the MIUR, function several bodies and agencies that represent, consul, assess the operations at every level of education. Starting from late fifties, there has been an effort of organisation's decentralisation, which was put under the umbrella of the law 59/1997, where the distinction was made between the tasks assigned to the State and the regional offices, with a clear emphasis on schools' autonomy (Eurypedia, 2013). School's autonomy concerns teaching, research activities, experimentation and development, and involving the possibility to implement specific actions or projects in the single school or in school networks, or develop particular didactical programs (in the general respect of ministerial guidelines). However, Italian educational system is characterised as rather centralised with low levels of autonomy at the school level (Agasisti, Catalano, Sibiano, 2013).

#### Description of the Educational System

The Italian education systems has been under reform for years, being a critical field where changes in government have been reflected in a series of reforms being not always on a continuity line. Compulsory education in the Italian system Thanks to recent reforms dating back to 2007, education in Italy is now compulsory for ten years (up to 16 years of age), whereas each person has to remain in education or training up to 18 years of age or for a total of 12 years. Specifically, compulsory education includes the first cycle of education (5 years of primary school followed by

3 years of lower secondary school, with no exam in-between) and the first two years of the second cycle of education. The latter can be accomplished either in upper secondary schools (“licei”, technical and vocational institutes) or within vocational training, namely in three-years courses run by the Regions which in Italy are responsible for managing and delivering vocational training. As far as upper secondary general education is concerned, a reform of 2010 has recently introduced a systematisation of upper secondary schools, in order to make clearer and more transparent the existing educational supply to students and parents, hereby counteracting a trend which in the last decades had produced - by means of experimentations - a huge number of different upper secondary school paths.

**Overall organisation of the education system** Overall the Italian education system includes:

- Pre-primary education “Scuola dell’infanzia”, which is for children between 3 and 6 years of age and is not part of compulsory schooling;
- The first cycle of education lasting 8 years, and organised in
  - Primary education (6-11)
  - Lower secondary school (11-14)

It is worth stressing, that unlike several European school systems, primary and lower secondary education remains two different education levels in Italy, each with its’ own specificities, due to a quite recent re-organisation of school cycle dating back to 2003.

- Second cycle of education consisting of two different pathways (with possibility to move from one to the other):
  - Upper secondary school, falling under the responsibility of the State, lasting 5 year and addressing students aged 15-19 (provided by licei, technical and vocational schools)
  - Initial vocational training (3-years courses) for students who have completed the first cycle of education, organised by the Regions and leading to a vocational qualification of first level.

The three-year vocational qualification obtained at the end of a vocational training path allows access to second level vocational training, which can be accessed also with an upper secondary education leaving certificate. Access to both tertiary education and AFAM (high level artistic, musical and chorus education), is reserved to students who passed the state exam at the end of upper secondary school .

Educational level Schools Pre-primary schools: 13.476 Primary schools: 15.417 Lower secondary schools: 7.270 Upper secondary schools: 5.397 Total 41.560 Fig.1 School settings per educational levels – State schools – School year 2012/2013 (Source: Miur, Servizio Statistico)

Type of school Schools Classi Licei: 489 Sciences Licei: 960 Pedagogical Licei: 301 Arts Licei: 135 Technical Institutes: 1.897 Vocational Institutes: 1.454 Arts Institutes:

161 Total: 5.397 Fig.2: School settings at upper secondary level per type of school - State schools - School year 2012/2013 (Source: Miur, Servizio Statistico)

### **Degree of Italian education system selection**

The Italian education system remains critically affected by the issue of “selectivity”, despite the recent integration between primary school and lower secondary education in one comprehensive cycle, which has provided increased continuity by cancelling the formerly necessary exam. The passage between school levels remains however critical. As mentioned above, the integration in a comprehensive first cycle is rather recent and has maintained most of the differences amongst the two levels, the related teaching/learning methodologies and subsequent difficulties which pupils have to face in the passage. However the real critical and sensitive passage remains that between the first and the second cycle, when students are asked to make a choice between different learning paths where to complete compulsory schooling up to 16 years of age. Although students cannot (in principle) “drop out” from the education and training system, they are however still obliged to make a rather early choice on their education paths (Licei, technical or vocational school, vocational training). Although theoretically, the system provides for permanent pathways from one path to the other, this critical stage put students in front of new challenges of different educational environments, with highly different requirements in terms of effort, expected performance and social demand. In order to respond to this challenge, the two compulsory years of second cycle are meant to provide students, in whatever type of school, with a common set of knowledge and transversal competences for lifelong learning, active citizenship and employability (see section 2.2), so as to ensure more equality, no matter which learning paths has been chosen. Nonetheless, the problem of “natural selection” of the Italian school system still persists, as great differences in school performance and school failure arise after the choice of the different upper secondary school and vocational training, producing in many cases subsequent “drop out” from education and training. This highlights as to what extent pupils needs to be equipped since the earliest stage of compulsory schooling with learning to learn competences and skills to effectively face further learning with autonomy and motivation.

Teacher training (formal provision and non-formal) focused on learning to learn and motivation to learn

### **Teacher in service training: the institutional picture**

The Italian system does not foresee any national institutional framework or top-down provision for teacher in-service training, although several initiatives, programmes and projects exist in the field. The picture is therefore once again rather confused and highly fragmented, making it difficult to provide a clear and homogenous representation of the supply and content of teacher training activities, in the absence of a centralised system of information and the abundance of scattered experiences, initiatives and experimental projects whose sources are difficult to find . From a legal perspective, teacher in-service training in Italy is regulated by the National collective



agreement, which affirms that teachers have the right to participate in teacher training initiatives in order to ensure their professional development. However they do not have the duty to go through further training once they have become teachers. Moreover this “right” consists mainly of the opportunity to take a few days off from school (usually around 5 days in a year) to attend training initiatives on a voluntary basis. On the other hand, in the absence of nationally organised in-service training and according to the principle of school autonomy, most of teacher training activities are in the organisational and financial responsibility of the single school. As reported in the Eurydice report 2009/2010, there are in fact three decision making level concerning teacher training

1. “The Ministry of education is responsible for intervention of “general interest”, above all those necessary for innovations, mobility and professional re-qualification and re-conversion, general co-ordination of the interventions. It annually establishes the priority objectives for planning and carrying out of formative interventions, the distribution of available resources, the role of different actors, bodies and institutional levels;
2. The Regional School Office guarantees, on single school request, professional service to support the planning character of schools, equalising actions and interventions related to territorial peculiarities and specific professions;
3. School or schools networks, according to school autonomy, plan training initiatives and prepare the relevant annual programme.”

In particular, the teacher assembly (including all teachers of the school) in every school decides its annual plan for update and in-service training activities, consistently with the objectives of the POF . The plan can include various types of initiatives, either organised by the educational authority (i.e. courses provide by the Ministry of Education) or designed and implemented by the single school autonomously or in association with other schools, and with the collaboration of universities, the national/regional institute for the development of school autonomy, research institutes and accredited bodies. The mentioned institutions are those who are automatically accredited for delivering teacher training, whereas other organisations such as civil society associations, professional bodies etc need a Ministerial accreditation which is released every year. The educational pathways vary according to their contents and duration. Schools, according to school autonomy, are free to plan and carry out intervention which better match their needs. The methods adopted are various and include lessons, case studies, simulations, elearning etc. There is no compulsory verification of learning outcomes and certification of the skills acquired. Generally, it is issued a participation certificate at the end of the course with indication on the type of course, the days and hours of attendance. There is no institutionalised method of verifying whether (and how) what has been learnt in in-service training is actually applied to didactic practice .

The Italian system includes a set of institutions and organisations dedicated to promote and support quality innovation in school education, by providing educational research, organisational and financial support, capacity building and advise and by promoting nation or region-wide programmes supporting schools in creating bottom-up innovation through experimental projects and through networking. Thanks to school autonomy, school itself is in fact expected to be the place where the abovementioned concepts are primarily addressed and promoted from bottom-up, in line with national indications (as mentioned in the previous section), with external organisations and agencies supporting the successful implementation of innovation and its mainstreaming, in terms of infrastructural support, expertise and research advise, financial support, support to teachers and school staff training, mainstreaming of innovation and support to cooperation among schools.

Other agencies/bodies:

**National Agency for the Development of School Autonomy, (ANSAS, ex INDIRE).**

This Agency was created with the introduction of School Autonomy in Italy at the end of the 90s, transforming the already existing national and regional Institute for Educational Research (INDIRE). The core mission of ANSAS is that of promoting and “supporting the autonomy of schools in the dimension of the European Union and the processes of innovation and educational research in the same institutions, as well as favouring their interaction with the territory” . The agency is part of the National Ministry of Education and has a central office in Florence and peripheral articulations at the regional level, in the Regional School Offices. The main functions of the agency include:

- educational research and pedagogical-didactical advise;
- Training and refreshing of teachers and school staff;
- Services of pedagogical and didactical documentation, research and experimentation;
- Participation in international initiatives in the matters of specific competence of the agency ;

Within the objective of overall development of school autonomy, the agency, and in particular its regional articulations, support several initiatives and projects which aim at favouring the development of innovation in school, promoting through them the concepts of learning to learn and motivation through both teacher training and experimentation in schools with students and staff. These objectives are for the most not explicitly stated as the core focus of the activities, but can be easily identified as an existing approach of many of them, aimed at introducing innovation in didactics, integrating it with the territory and promoting more experiential and laboratorial learning activities so to make learning more meaningful and effective for students. The method of “research-action”, including therefore a substantial component of analytical research is part of the agency tradition, and significant amount of research results, documentation, project evaluations is produced by the Agency and relates to

the themes above. More information can be found at [www.indire.it](http://www.indire.it) and in the official websites of the regional agencies, where several projects and initiatives can be found, together with research projects and documentation. Leading examples can be found in the initiatives of ANSAS Emilia Romagna for instance, supporting several innovation projects in school aimed at promoting motivation to learn and better school performance by working closely with the actors and the resources of the territory and by supporting teacher training.

### **INVALSI, National institute for the evaluation of the educational system**

INVALSI is the national institute responsible for monitoring and evaluation of the school system in Italy, with an approach oriented to enhance its quality, hence supporting students' performance with respect to international standards (namely OECD-PISA) and contrasting school failure. INVALSI has amongst its tasks "to evaluate the efficiency and efficacy of the education system as a whole and analytically, where appropriate also for each educational institution, also setting the evaluation at national level and in an international contexts". In particular, INVALSI is responsible for systematic and periodic evaluation on students' knowledge and abilities and on the overall quality of educational supply, by managing the National Evaluation System ("Sistema Nazionale di Valutazione") and acting as the Italian reference point for the PISA survey. It furthermore studies the reasons of school failure and drop out also with reference to social contexts and typologies of educational supplies.

More in general, INVALSI supplies several support services concerning the evaluation of different national and regional initiatives in education. The activity of INVALSI is acknowledged by the Italian Ministry of education as fundamental in contributing to the achievement of the Lisbon objectives in the field of education and training, with specific reference to the quality of education systems and of the levels of learning achievements. In that respect, INVALSI contributes to the promotion of learning to learn as it is the main institution responsible for analysing and assessing the organisational and teaching practice which favour the enhancement of students' performances. Moreover INVALSI published articles, working papers and books on different subjects, including learning to learn, key competences and evaluation of school systems and projects with respect to their impact of the acquisition of competences and on school success.

## **7.2 Policy environment**

### **Policies on key competencies in LLL**

Since 2007, the objectives of education are in line (at least formally speaking) with the main European documents and strategies for lifelong learning and pay importance to the key competences approach and to "learner-centred education" as conducive to lifelong learning, active citizenship, social inclusion and employability. In that respect, the main reference documents are:

- the Ministerial Decree no. 139/2007 and its annexes, raising the age of compulsory schooling up to 10 year (16 years of age), providing that the first two year of upper secondary education focus and lead on the acquisition of fundamental knowledge and key competences for lifelong learning and active citizenship, in line with EU competence framework for lifelong learning;
- The Indications for the curriculum of the first cycle of education (including primary school and lower secondary school) stressing the role and responsibility of initial education in preparing the individual for learning throughout life;
- The guidelines on the implementation of the 10 years of compulsory schooling (accompanying the ministerial decree mentioned above), illustrating how to move from an upper secondary school fragmented in subjects to a more integrated teaching/learning approach oriented to competences and focused on 4 cultural axes and 8 key competences, with the aim of preparing students for lifelong learning, active citizenship, employability and an aware choice on further education or training.

All the above mentioned documents pay in principle the utmost importance to the role of school in preparing students for lifelong learning and active citizenship and - in that context - to learning to learn and motivation, asking for a shift from subject-centred didactics to more integrated learning paths ensuring the development of key competences and smartly built around the learner's experience, which extends from school to other life contexts. In that respect, there is an explicit acknowledgement that today school is only one amongst the several learning environments experienced by children and teen-agers, and that most of information and competences are also gained outside of the school borders. School is thus recognised a pivotal responsibility and role in "promoting students capacity to give meaning to variety of their experiences and face the structural uncertainty and change characterizing contemporaneous society". In this sense in the policy discourse, the acquisition of key competences, the ability to master one 'own learning path, and the motivation needed for it, are linked to the idea of preparing autonomous citizens for the challenges produced by social, economic and scientific transformations. This approach has been reflected in the new indications for the curriculum for the first education cycle and in the guidelines on how to implement the ten years compulsory schooling in the first two-year of upper secondary education. These two documents shall be interpreted (and implemented) with a "continuity" approach, so as to make the whole school experience integrated, meaningful and headed towards preparing autonomous citizens. In both cases a pivotal responsibility and important role is put in the hands of teachers and school staff to innovate teaching and fruitfully use school autonomy (at didactical and organisational level) so as to implement learning paths able to match the challenges of ongoing transformations and ensure that school fulfil its objectives at the different level.

The indications for the curriculum of the first cycle: "equipping pupils with the key for learning to learn". According to the national indications of 2007, the first cycle of education shall be designed around the learner, favouring personal learning styles and paying great importance to the group of peers and to collaborative learning

approaches, favouring students' participation in a "shared educational project". School shall provide the basis for future learning of children and equip pupils with the key for "learning to learn". To this aim, the following key approaches are to be central in the teaching practice and school organisation:

- Spending effort on a double education level: vertical: preparing for lifelong learning and horizontal: cooperating with the territory and, above all, families;
- Valuing students experience and knowledge, so as to anchor new contents and knowledge to their life and make them meaningful and relevant to the learner;
- Favouring exploration and discovery, so as to stimulate joy and enthusiasm for new knowledge;
- encouraging collaborative learning;
- promoting reflection and awareness on one' own learning processes;
- Using laboratories and practical activities, so to favour active learning and practical acquaintance with concepts which will then be consolidated at a more theoretical level and promote dialogue, reflection, experimentation and planning.

The document calls for a fruitful exploitation of the potential and opportunities offered by school autonomy and in particular for a flexible and "multi-purpose" usage of school and extra school spaces. Guidelines for the implementation of compulsory schooling in the first two years of the second cycle of education: preparing lifelong learners, autonomous citizens and employable workers As mentioned in previous sections, the age of compulsory schooling was raised up to 16 in 2007, making compulsory to attend two years in upper secondary education which shall be oriented to the acquisition a fundamental body of knowledge and competences preparing for lifelong learning and active citizenship, in line with the European competences for lifelong learning (as adopted by Recommendation of the European Parliament and of the Council on 18th December 2006). These include the key competences ("competences for citizenship") that students are expected to have acquired at the end of compulsory education, regardless of the school path, as well as a set of basic competences related to four 'cultural areas/axes'. The aim of this reform was to homogenise different schools' curricula in the first two years in order to ensure the passage from teaching processes which were mainly subjects-centred to learning experiences centred on competences, so as to make different school paths more equal in terms of learning outcomes and "universal" preparation for the lifelong learning, active citizenship and employability. The four axes are:

1. that of languages;
2. mathematical;
3. scientific-technological;
4. social-historical;

According to the indication of the Ministry, they "shall act as the basis to build learning paths headed towards the acquisition of related competences (including



knowledge, skills and competence as in the EQF) as the result of the their integration”. The 8 key competences are on the other hand defined as “the result coming from the integration in a learning process of knowledge and skills related to the four cultural axes”. The 8 competences include:

1. Learning to Learn: defined as being able to organise one’s own learning process, also by identifying, selecting and using different sources and information and learning modalities (formal, non formal, informal), according to time available, individual learning styles and working strategies;
2. Planning: meant as the capacity of elaborating and implementing projects concerning the development of one’s own study and working activities, using acquired knowledge to establish meaningful and realistic objectives and related priorities, being able to evaluate existing constraints and opportunities, defining strategies for action and verifying results.
3. Communicating:
  1. Understanding messages of different nature and different complexity level, and coming from different media with different languages (mathematical, symbolical, scientific etc.)
  2. representing events, phenomenon, concepts, emotions etc, using different languages as above
4. Collaborating and participating
5. Acting in an autonomous and responsible way
6. Solving problems
7. Identifying connections and linkages
8. Acquiring and interpreting information

In this context, motivation is recognised as key in enabling learning and the acquisition of key competences. The technical document attached to the decree of 2007 (raising compulsory schooling) states explicitly that “Access to basic knowledge is made possible and favoured by a positive attitude towards learning. Motivation, curiosity, collaborative aptitude are the behavioural aspects which integrate knowledge, value individual cognitive styles towards personal fulfilment, facilitate the opportunity to understand one’s own aptitudes and potentialities, hence supporting self-orientation. In that respect, an important contribution can be offered – with regards to all cultural axes – by didactical methodologies able to value laboratory activities and experience-based learning. The guidelines invites to a deep methodological and organisational revision of didactic in school with the aim of moving from a subject-based towards a competence-based approach, through the integration/interaction among disciplinary areas and new activities. In that respect, school autonomy is once again elected as the core instrument and the key level where to make the innovation possible from bottom-up and move towards a school oriented to competences for citizenship. Teachers are explicitly recognised as key actors in the process, as the single school is asked to reflect on how to:

- Identify the most adequate strategies for the integration of disciplines, in order to overcome the fragmentation of knowledge
- Implement learning paths on the four cultural axes

- Organise learning processes based on the acquisition of competences;
- Fruitfully use the opportunities offered by curricular and organisational flexibility coming from the provision of “school autonomy”.

In order to support teachers in playing an active role in the transition to a competence-based approach as the one illustrated below, the Ministry committed itself in 2007 to organise multi-years plans for teacher training activities specifically aimed at supporting the innovation process. These should have been based on exchange and valorisation of experiences among schools and peers with the aim of:

- Sharing the New Vision of school;
- Identifying adequate methodologies to implement this new vision in school practice, by connecting disciplinary knowledge to cultural axes so as to lead to the acquisition of key competences
- Valuing the connection between cultural axes;
- Adapting assessment and evaluation to a competence-based approach.

Likewise, the Ministry meant to organise

- An online service for school, providing for guidance and support
- Local groups including regional school offices (which in Italy are the local representation of the Ministry of education), schools, institutes for educational research, local governments, universities, teachers associations etc, supporting schools in the implementation of the new compulsory schooling.

It remains to sort out whether these activities have been implemented and how and the effect they produced, on both school innovation and teacher training and practices. After the 2007 reform (promoted by a centre-left government), a new government was elected in Italy introducing further changes in the education system, though maintaining the indications for the curriculum of the first cycle and for compulsory schooling. A reform has been on the contrary recently introduced in teacher education, another critical field where changes in governments and longstanding structural problems have turned into a series of reforms and stop-and-go, which have made the overall picture rather unclear and still dynamic.

### *Reducing early school leaving.*

The specific national targets for Italy have been set at 16% for the early school leavers. From 2007 to 2010, various interventions on the education and training system were aimed at limiting early school leaving and drop-outs. These interventions tackle drop out at various levels, from the extension of compulsory education to 16 years of age and therefrom of the second cycle of education to more strategic actions, like the strengthening of school autonomy. Support mechanisms have been put in place like the creation a local network of actors involved in guidance, while promoting a new culture of guidance among school staff consistent with national policies. The law decree no. 104, issued in September 2013, provides for a series of interventions and economic measures also aimed at fighting school

drop-outs. For example, the allocation of funds to increase catering and transport services in order to facilitate access and attendance of deserving students of secondary schools in disadvantaged economic conditions has been prescribed. Last but not least, one unified national system of student register will allow students to leave their school pathways and accomplish compulsory education (up to 16 years of age) in the regional vocational education and training system. In the last year, the functioning of the National register has been highly refined (Source: Servizio Statistico, Miur, Focus 'La dispersione scolastica', June 2013).

### *Lifelong Learning and Skills Certification*

Law of 28 June 2012, no. 92, 'Provisions for the reform of the labour market in the prospects for growth', has provided for a formal definition of lifelong learning: 'lifelong learning encompasses learning activity, whether formal, non-formal or informal, undertaken throughout life with the aim of improving knowledge, skills and competence within a personal, civic, social and/or employment related perspective'. According to the law, formal learning takes place in the education and training system as well as universities and High level arts, dance and music education institutes. It leads to obtain a qualification or a vocational three-year qualification or diploma, also through an apprenticeship, or a recognised certification. Non-formal learning corresponds to an intentional choice of the learner carried out outside the formal system, in organisations with educational and training aims, in voluntary settings, national civil service or private social services as well as in enterprises. Informal learning corresponds not necessarily to an intentional choice of the learner, but to activities and interactions in everyday life situations, at work, at home and in the leisure time. Moreover, the law provides also for establishing territorial networks – including education, training and work services systematically linked to the strategies for the economic growth, young people's access to the labour market, welfare reform, active aging, exercise of active citizenship also by immigrants - as well as for supporting the building up of peoples' learning paths in the various contexts, the acknowledgement of formative credits and the certification of learning attainments, the use of guidance services available on a lifelong basis. Territorial networks of services are also made up by universities, enterprises through unions and employers representatives, chambers of commerce, industry, handicrafts and agriculture, the Observatory for internal migration in the national territory. Eventually, law provides for a national public system for competencies certification based on minimum service standards homogeneous on the whole territory. 'Certifiable competence' is a series of knowledge and skills that can be acknowledged as formative credits; however, a special validation procedure is requested for non-formal and informal learning. Competence certification is defined as a deed aimed at assuring transparency and recognition of learning outcomes, in accordance with the European Union policy. A certificate, diploma or study title will formally prove that such competencies have been tested and validated by a public body or any other authorized and accredited entity. The Legislative Decree no. 13/2013, issued in application of what foreseen by Law 92/2012, defines the general dispositions on the national system of certification of competences. The aim of these dispositions is to make arise and develop professional competences non-formally and informally acquired, and to promote

professional and geographical mobility, to facilitate the contact between of labour supply and demand, to increase transparency of learning and the recognition of certifications at national and European level.

### *New Skills and Jobs*

The Ministry of education has acknowledged the need for greater links education and labour and has taken action for the reform of technical and vocational education, in the effort to provide to youth and their families a better future. The tools made available for this are: students' curricula available on schools websites, the link with the National labour bank, the development of digital and linguistic competences and mobility through European programmes. From 1st September 2011 a working group is providing guidance for the re-launch of technical and vocational education and information, such as brochures and digital files introducing pupils to technical, vocational and higher technical institutes, and other multimedia products are provided through the web and the TV. Finally, the Legislative Decree n. 13/2013 is also reinforcing the Government's strategic planning the implementation of this agenda.

### *Learning mobility*

The objective is to contribute to reach the goal of 20% of graduates with mobility experience by 2020. Mobility is based on actions of the Lifelong Learning Programme, Youth on the Move and Erasmus Mundus, jointly developed and supported by National Agencies and National Authorities. Individual mobility of students at upper secondary level, starting from school year 2010/2011 within the LLP's Comenius action has been decided. Further details are available on the Individual mobility of students (Mobilità individuale degli alunni – MIA) webpage. Additionally, certain actions have taken place to make Italian Universities more attractive and accessible also to foreign students: Admission tests delivered also in English starting from academic year 2012-2013 (in collaboration with the University of Cambridge), a single portal for enrolment (<http://www.university.it/>), promotion programmes offered in English; promotion of joint or double qualifications.

### *Basic Skills, Literacy, Mathematics, Science and Technology, Languages*

There has been recent reform of the second cycle of education (2010) aiming at fostering the mathematics-scientific area through additional teaching hours for these subjects. Regarding technical and vocational institutes, the reform suggests reinforcement of basic competences and skills as well as teaching of earth sciences, biology, physics and chemistry. Language teaching/learning in the Italian upper secondary schools is also considered priority and actions are put in place for this aim, taking into consideration that students should reach a B2 CEFR level of competence at the end of their upper secondary schooling. In upper secondary schools CLIL is used as a teaching method (3rd grade in Licei Linguistici and 5th in other Licei and technical institutes). The "E-CLIL" and the "Read on! for e-clil" projects have been designed for the implementation of this reform.

### *Teacher education*

As anticipated above, the above illustrated educational system has been in place until 2010, when a new reform has introduced some modifications, maintaining teacher education under university control, but aligning it with the Bologna process and cancelling the specialisation schools, introducing one year traineeship in school to practice and observe the “teaching” profession at the end of the master degree. This reform is still under critical debate, and shall enter into full implementation only starting from the school year 2010/2011. According to this recent reform, starting from school year 2011/2012, teacher education shall be organised as follows:

- primary school teachers will have to attend a 5-years degree (laurea Magistrale a ciclo unico) in primary educational sciences; traineeship in school will take place starting from the first years of university, maintaining a systematic contact with the world of school and practice.
- Teachers in secondary school will attend specific master degrees, which can be accessed given the acquisition of a bachelor degree with specific credits in given disciplinary areas. The master degree will be followed by one year traineeship in school, called “Tirocinio Formativo Attivo”, during which the prospective teacher will be supervised and supported by a tutor and will work together with school teachers.

The main innovation in this reform seems to be the specific importance paid in teacher education to the difference between preparation for teaching in lower secondary school and preparation to face upper secondary school students, which will be reflected into different paths. The debate is however sensitive, as this reform is currently criticised for decreasing the strong exchange and relationship between university and school in the preparation of teachers, which for some was well guaranteed in the specialisation schools, meant as laboratory where teachers and university professors of the pedagogical area worked together to prepare students to become teachers. Moreover while the specialisation school had an interdisciplinary approach, being organised together by different faculties, this reform seems to create isolated silos for teacher preparation, too much anchored to the specific disciplines and in the hand of the single faculty, where the influence of “subject” professor scarcely interested in the pedagogical, sociological and didactical aspects, might decrease their importance in the preparation of teachers.

### **Policies on ICT in the learning process**

National Plan for Digital Schools The Italian Ministry of Education launched in 2007 a National Plan for Digital Schools (Piano Nazionale Scuola Digitale) to mainstream Information Communication Technology (ICT) in Italian classrooms. ICT is considered as a tool for change and introduction of innovative practices in teaching, learning and organisation. Italy’s national ICT plan is based on four initiatives:

- Equipment of schools with IWB (Azione LIM in classe),
- 3 test-bed projects (cl@sse 2.0, scuol@ 2.0, Editoria digitale scholastic).



### *Digital management systems and resource provision*

One other initiative of the Ministry of Education is to introduce ICT as a means of organisation and management for the schools. In the context of cost saving, the decree law 95/2012, art. 7 cc. 27-32 (converted into law 135/2012) demands that schools need to have in place management information systems that will record pupils' data, attendance, family-school communication, reports etc. On the same line, families need to enrol their children electronically to schools, using online forms. This systems need to be in effect from the school year 2012/2013. The ministry has provided the possibility of transfer of this data to the Anagrafe Nazionale degli Studenti, the national longitudinal information system with electronic records of individual students, aiming at interoperability of systems offered by the industry. The Anagrafe Nazionale degli Studenti is also used for school evaluation. In a similar context is the operation of the scuola in chiaro ("school uncoded"), which provides a description of each school in figures and numbers. This information is available to public. This is another policy promoted by the Ministry of Education. Along these initiative can be the compulsory provision of e-books and books in mixed format as well as the establishment of "digital school centres" in isolated villages (Crescita 2.0 decree). In parallel, catering for pupils with Special Educational Needs (SEN), Law 4/2004, Art.5, makes special reference to provisions to support the access to information technologies for the disabled. As stated, in case that there is availability of fund, the resources made available to schools/pupils/teachers in hard copy should be offered also in digital form so that pupils with SEN will be able to access them. Despite these ambitious initiatives in ICT in Education, 'Italy lags behind most OECD countries when it comes to equipment and usage of information and communication technology (ICT) in school. For example, in 2011, only 30% of Italian students in 8th grade used ICT as a regular instruction tool in science classes, compared to 48% on average in an OECD country', OECD (2013). Although the Italian teachers appear confident in their use of ICT (close to the EU mean) and have attended formal and informal ICT training, their pupils' use is lower than the EU mean. It's worth noting that the pupil computer ratio is relatively high In Italy, as well as the school access to broadband (EUN, 2012).

### **Policies on creativity and innovation**

Social innovation is considered a priority strategic objective within the Italian policy. Innovation in education and society, in general, and the mainstreaming of ICT are very much interconnected. Specifically, the Digital Agenda, of the National Operative Programme and projects in the framework of 'Smart Cities and Communities and Social Innovation' (one of the objectives of the European Framework Programme "Horizon 2020", due to start in 2014) work towards the same direction. Expanding on the 'Smart Cities and Communities and Social Innovation' plan, everything that constitutes part of the society needs to be smart: cities, schools, teaching. All the possible bodies, agencies, research centres, industries etc are working innovatively and providing for a smart city, a smart community. The citizen is in the middle of this process and the services provided to her need to aim at her well-being. In this context, even school premises need to be rethought and repurposed so that they are

appropriate for an innovative model of organisation, teaching and learning. In this planning, the school is part of a system, has a role in the society, reaching out to it and bringing in the trends of the contemporary world. ICT is a tool that can assist schools in succeeding this. The projects mentioned in the section 2.1 are all aiming towards this direction.

### Partnership with Business, Research and Civil Society

DPR no. 87/2010 foresees the possibility for State vocational institutes to activate three-year IFP (regional vocational education and training) courses, on a subsidiary basis. The Ministerial Decree no. 4 of 18 January 2011, describes the adoption of two organisational methods: the 'integrative method' and the 'complementary method', concerning the linkage between State vocational institutes and regional vocational education and training courses. According to the integrative students are provided by the State vocational institutes with competences which are necessary for the acquisition of a regional qualification (IFP) at the third year, within the five-year course of study, upon passing a Regional examination. The 'complementary method' is based on the scheme of State vocational institutes activate courses aimed at a three-year and/or a four-year Regional IFP qualification, without allowing the attendance of the fifth year of vocational training in the mainstream path. VET paths leading to a three/four-year regional vocational qualifications fall under the competences of the Regions and are included in a 'National catalogue' approved through the Agreements signed by the State/Regions Conference on 29 April 2010 and 27 July 2011. Linking all the VET systems works towards the agenda for the prevention of drop-outs; the facilitation of mobility and the recognition of credits and qualifications.

Regarding the improvement of the quality of labour force, many mechanisms have been activated and many actions are being foreseen, such as improved funds for continuing training and formative and guidance traineeships, with essential protection standards. Simultaneously, the Universities are asked by the Ministry to monitor graduates' employability, which forms part of the university's evaluation procedure and covers also for the distribution of available resources. Communication between universities and representatives of the labour world for the joint analysis of programmes and of competences students should acquire is considered as positive aspect for universities' evaluation. In addition, the Ministry has started initiatives to promote the enrolment and completion of programmes in scientific fields, usually not too attractive for students but instead leading at the acquisition of competences strongly required by the labour world.

### *School autonomy*

One of the most important institutional element to take into account when addressing issue related to school needs, problems and innovation capacity in Italy, is the provision of school autonomy, granted by law since 1997 to single schools. School autonomy plays today an important role in bottom-up innovation of school to pursue new educational goals as defined in key political documents, and is a crucial element

to take into account when analysing the Italian school system with regards to the bottom-up opportunity, capacity and innovativeness in implementing learning strategies more oriented towards learning to learn and motivation and integrating formal and non formal learning opportunities. A meaningful part of the potential of school autonomy resides in the possibility/ability to cooperate with the actors of the territory: students' families, social services, local bodies, enterprises, cultural bodies and no profit organization, as well as other schools. The Law supports in particular the creation of schools' network in order to share experiences through the institution of laboratories for didactical research and experimentation, sharing of documentation, teachers' training, educational and training guidance. In particular, each school autonomously elaborates its POF (piano dell' offerta formativa- educational offer plan), a document including the whole school's educational offer in terms of curricular and extra-curricular activities, as well as organizational settlement, framed in the national educational objectives and taking into account students' and families' needs. A school reform of 2003 introduced in the principle of school autonomy the opportunity of formulating Personalised Study Plans (PSP, Piani di studio personalizzati) , individualised paths conceived by teachers on the basis of student's needs and allowing for a flexible design of school activities (classes, groups, obligatory and facultative hours, free choice of families, involvement of parents and students in the preparation of the portfolio and with the PSPs organisation), and open to extra-school and network activity (laboratories), aiming at applying in a concrete way the principle of "continuity of education and in education".

### **Policies on intercultural learning skills**

The Guiding Act of the Ministry of Education of 2013, confirms the will of continuing actions to tackle drop-outs, to prevent discomforts in youngsters, drug addictions, the integration of disabled pupils and of recent immigrants, by intervening, in particular, on the teaching of the Italian language, also through multi-media programmes.

#### *Equity and Diversity*

In 2007, the National observatory for the integration of foreign students published 'The Italian way to inter-cultural school and the integration of foreign students' (La via italiana per la scuola interculturale e l'integrazione degli alunni stranieri), which describes the national strategy on this issue. The main axes of the document are the 'inter-culture' element, which involves all pupils and all disciplines, and that of 'integration', addressed in particular to recent immigrant pupils for language learning. The document refers also to the organisation of future national training workshops for the exchange experiences between school managers. According to the Ministerial Circular of 28 January 2010, a maximum limit of 30% of immigrant pupils is prescribed for each class, aiming at the facilitation of the pupils' effective integration. Law Decree n 104/2013 foresees the allocation of 10 M euros for mandatory CPD programmes, especially for teachers of schools with low results and in areas at risk of social disadvantage. Regarding the integration of disabled pupils and their full inclusion in mainstream education, in 2009, the Ministry of education has published the 'Guidelines for the integration of disable pupils at school', catering for the

evaluation framework of the educational interventions made for disabled pupils and increasing the quality of provision in this way. Dyslexia, dysgraphia, dysorthography and dyscalculia are recognised as Specific Learning Disabilities (Law 170/2010) and specific educational and didactic methodologies and actions are advised to be applied, starting at pre-primary education, to support teaching and learning. The Ministerial Directive of 27 December 2012 the role of the Local support centres is highlighted in order to assure the school inclusion through actions of information, training and counselling.

## Reforms at National Level

### *The National Evaluation System*

In March 2013, the Decree regulating the National Evaluation System has been definitively approved. According to the Decree, the National Evaluation System (SNV) is made up of three elements: the National institute for the evaluation of the education and training system, which task is to prepare tests for the external evaluation of pupils' learning outcomes, to take part in international surveys and of carry out national surveys on national standards; the National institute of documentation, innovation and research in education which is committed with the support to improvement and innovation processes, the continuing professional development of staff and the documentation and research in education; the inspectorate, which is autonomous and independent and is committed with the evaluation of schools and school heads. In fact, according to the approved regulation, the school evaluation process starts from self-evaluation, while external evaluation should be carried out preferably in critical situations needing support. The results of the evaluation should be the base of improvement plans that should be created with the support of Indire and of other qualified subjects.. Increasing higher education attainment Target for Italy: 26-27% for the share of population having completed higher education Sub-objectives

1. reduce the time necessary for obtaining a degree;
2. reduce drop-outs before the second year of studies
3. rise enrolments through a reform of the rules on the Right to study
4. offer joint degrees and courses of studies in English to attract international students.

### Interventions:

- the reform introduced in 1999 (Bologna Process)
- the use of the ECTS system and of students' learning attainments
- the attention paid on lifelong learning
- the guidance for future students
- the spreading of distance learning
- the introduction of part-time courses
- diversifying students' population

- increasing the attractiveness of Italian university among international students have been carried out.

Since 2010, the framework for evaluation of the education offer and of universities has been set. Law 240/2010, a new system of initial and recurrent accreditation and of evaluation of study course and universities has been introduced. Therefore, universities are expected to improve their financial management and the quality of the didactic, to increase the number of graduates and research activities. Concerning the higher education sector, a special emphasis is being put on students placements; promotion of Erasmus. Law no. 240/2010 has set up the 'Foundation for the recognition of merit', which task is the management of the Fund for merit established for the promotion of quality of learning in the school and university system by Decree no. 70 of 2011, converted into law 106/2011). As for the system of aids to education (Legislative Decree 68/2012), the legislation establishes the minimum levels of performance to be guaranteed in the services offered to students (e.g., accommodation, canteen, guidance, tutoring, part-time activities, transports, access to culture in general, etc.). The standard amount of grants to be awarded to students meeting the minimum requirements of academic merit and of socio-economic conditions has been established. There has also been an increase the number of grants available and to facilitate intra-Regional mobility. In addition, the reform of Doctoral studies has been approved: quality standards have been set regarding Doctoral education, Doctoral education providers and guarantees for Doctoral candidates. Synergies between research institutions, national and international, and enterprises active in research and innovation are highly estimated and form part of the Universities' evaluation.

### *Approval of the Regulation on the Adult Education Centres*

In February 2013, the Presidential Decree no. 263/2012 containing 'General dispositions for the re-definition of the didactic and organisational asset of the Adult education centres' has been published in the Official Journal. According to the new regulation, starting from school year 2013-2014, former Permanent territorial centres and 'evening courses' will merge into the Provincial Adult education Centres (Centri provinciali per l'istruzione degli adulti – CPIA). The Centres will provide an educative offer organised in levels of learning aimed at the obtainment of the qualifications released within the mainstream education system. The new Centres will be a kind of autonomous institutions, organised in service networks, mainly at provincial level, with the same autonomy of mainstream schools, their own staff and collegiate bodies adapted to the specific nature of the users (e.g. the 'class council' in mainstream schools will be called 'level council', as groups are organised in levels of learning, rather than by age). Centres will be built in such a way that it is possible to realise a strict link with local authorities and the labour and professions world. Centres provide their own formative offer. Italian and foreign adults, who did not finish compulsory education or do not own a first cycle (primary plus lower secondary education) certification can enrol in the Centres. Foreign adults in their working age, also if owing certifications released in their country of provenance, can enrol in literacy courses and Italian language courses. Centres can enrol 16-year olds who do not



own a first cycle certificate and, upon specific agreements among the Regions and the Regional School Offices and only in case of exceptional and justified circumstances, can also admit 15-year old learners. Courses for adults are organised as follows:

1. first-level courses, aimed at the obtainment of a first cycle qualification and of the certification on the acquisition of basic competences to be acquired at the end of compulsory education;
2. second-level courses, aimed at the obtainment of a technical, vocational and artistic qualification;
3. literacy courses and Italian language courses, addressed to foreign adults and aimed at the obtainment of a language certification attesting the acquisition of a level above A2 of the Common European framework of reference for languages.

Specific measures on workload and timetables are foreseen to meet the needs of learners:

- welcoming and guidance activities aimed at the definition of an 'Individual formative agreement', for a maximum of 10% of the overall amount of hours;
- acknowledgment of credits acquired, of learners' knowledge and competences formally, non-formally and informally acquired;
- personalisation of the study path related to the level of the course, that can also be completed the subsequent year, according to what foreseen in the individual formative agreement;
- overall learning hours equal to 70% of the amount foreseen for the mainstream courses of studies;
- distance learning, corresponding to a maximum of 20% of the overall learning hours.

### 7.3 Past and current initiatives and projects in Schools

#### ICT projects

The 3 major ICT projects include schools, which have been granted entrance to the projects through a competition process. Their role is to experiment with various ICT tools/resources. The action 'IWB in the classroom' (Azione LIM in classe) It aims at the widespread distribution of IWB in schools, the change in teacher's practice, the promotion of communication between pupils and teachers and the indispensable teacher training. The Action 'Cl@ss 2.0' (Azione Cl@ssi 2.0) It aims at establishing a classroom where continuous use of ICT is taking place for teaching, as well as for personal and social communication. The action 'Scuol@ 2.0' involves a whole school in an innovative and groundbreaking change in the learning and teaching process. The school is promoting new educational practices, abandoning the traditional ones and aiming at a reform of the school routine, introducing the importance of a personal educational plan. The digital plan has a clear aim to engage interested teachers with tools that are innovative and practices that bring a change in teaching and learning.

Professional development is also at the centre of the initiative. The principles behind the plan are solid and well grounded but its impact though has been criticised. In the OECD review of the plan (2013) it is suggested that ‘the small budget of the Plan has limited the effectiveness of its diverse initiatives’. The allocation of the Plan has been EUR 30 million annually for 4 years (less than 0.1% of Italy’s public budget for schooling).

Innovation projects

### *The “Innovadidattica” programme*

The project has the objectives of:

- Promoting the design and experimentation of learning paths oriented towards competences;
- Favouring cooperation and “collegiality” in competence-based didactics and evaluation;
- Diffusing the practice of evaluation, with specific regards to those competences included in the OCSE PISA survey;
- Supporting continuity between school cycles;
- Evaluating the sustainability of didactical proposals on the part of the student;
- Favouring circulation of didactical instruments and material produced by schools so as to promote transferability and capacity building.

### *The Ambienti per l’apprendimento*

Ambienti per l’apprendimento aims at providing better environments for the pupils to learn and the teachers to teach. The provision of new laboratories with improved health and safety conditions, in compliance with the energy saving regulations, for 4000 schools, from, part of this project.

### *Competenze per lo sviluppo*

This programme aims at the improvement of the school quality, the enhancement of teachers’ development, the improvement of teachers’ and pupils’ skills and competences, the preparation of pupils for entering adult life and the job market and the reinforcement of Lifelong learning.

## 8. Netherlands

### 8.1 National context

#### Population, economic and social characteristics

In 2013, The Netherlands has 16.8M inhabitants and the population is expected to increase during the next decades. Over the past decades, the average number of children per woman has decreased to 1.75 in 2012. As a result the population is relatively aging.

Table 1: Distribution of the ages: 1950 1960 1970 1980 1990 2000 2010 Total x 1 000 10027 11417 12958 14091 14893 15864 16405 Males x 1 000 4998 5686 6465 6994 7358 7846 8112 Women x 1 000 5029 5731 6493 7097 7534 8018 8293 < 20 yrs % 37,3 37,9 35,9 31,5 25,7 24,4 24 20 - 45 yrs % 35,9 32,9 34 37,2 40,9 37,7 34 45 - 65 yrs % 19,1 20,2 20 19,8 20,7 24,4 27,3 65 - 80 yrs % 6,7 7,6 8,4 9,2 9,9 10,4 11 80 + years % 1 1,3 1,7 2,2 2,9 3,2 3,7

The coming decades, the immigrant population is expected to grow strongly, it is expected that in 2050 5.3 million immigrants will be living in the Netherlands. That equates to 30% of the total population. The share of Western immigrants in the total population will increase from 9% in 2005 to 13% in 2050. The share of non-western immigrants is expected to increase from 10% in 2005 to 17% in 2050. Non-Western immigrants are concentrated mainly in the big cities.

Table 2: Distribution of natives and immigrants per January 1st, 2009: Population groups Number Immigrants 3.287.706 Natives 13.198.081 Non western immigrants 1.809.310 Total population 16.485.787

In general, non western immigrants earn considerably less than natives. About 25% of all non western immigrants have an income in the lowest income docile. The main reason is that a relatively high percentage of non western immigrants do not graduate secondary education or graduated from a vocational school. Non western immigrants have a 400% higher criminality rate compared to natives. The latest 2012 statistics show that 65% of all immigrants from Morocco and 55% of all immigrants from The Dutch Antilles have been arrested in relation to a crime before the age of 24.

#### Social security

The current Work and Social Assistance Act was implemented in 2004. The act was designed to serve as a system of incentives targeting municipal authorities to help people with benefits and in finding work. The social security system of the Netherlands include a system for invalidity benefits and an unemployment insurance act. The social security system is regarded to be among the most generous systems in the world.

## The Dutch economy

The Netherlands is the 17th largest economy of the world. The GDP per capita is roughly \$42,000 which puts it in the top 10 of richest nations in the world. Between 1996 and 2000 the annual economic growth GDP averaged over 4%, well above the European average. Growth slowed considerably in 2001-05 as part of the global economic slowdown. 2006 and 2007 however showed economic growth of 3.4% and 3.9%. The Dutch economy was hit considerably by the ongoing global financial crisis and the ensuing European debt crisis. Several banks went bankrupt, and a number of others had to receive governmental aid. In 2009 the economy declined with 3.5%, followed by two years of mild growth. The Dutch economy is currently in a recession again, with an economic decline of 0.5% in 2012. Inflation is at 3.2% in February 2013. Unemployment has been relatively low compared to other EU nations for decades but after mid-2012 it has seen a fast increase and in February 2013 it has hit 7.7%. The Netherlands managed to maintain its AAA rating at least until March 2013 according to the three major credit rating agencies. Such success has fostered much interest in the Dutch “polder model”, short-hand for the system of policymaking by consensus among interested parties, and especially between employers and employees. The polder model, it is often said, demonstrates that economies can grow and jobs can be created without dismantling the rigid and generous European social-welfare system. Similarly, it is argued that consensus policies, agreed across the political spectrum (coalition government is inherent in the Dutch electoral system), are the best way of dealing with social problems

## Description of the types of education and training (formal and informal)

The Dutch education system features many different types of schools, each offering a curriculum geared to pupils' needs. Primary and secondary education are fully funded by the state. Higher Education is becoming more costly, but remains at a relatively low cost level. Students are offered loans that they will have to repay to the Dutch government after graduation. Secondary education paves the way for vocational or higher education. The higher education system aims to provide top-quality teaching and training at professional or academic level. Special education is provided to pupils with learning and behavioral difficulties. Primary schools (age 4-12) are primarily small schools that typically employ 10 to 20 staff members. In most schools, the staff consist of a dedicated school head, a part time secretary (for larger schools) a part time concierge and the teachers. Teachers are graduates in pedagogy and have obtained a bachelors degree in educational sciences. Teachers in primary school teach all subjects. The school head usually is a former teacher. Most school heads can spend 100% of their time leading the school. Besides pedagogical leadership, they are in charge of the daily activities, often mandated by school boards. Most primary schools are a part of a collective. These “bovenschoolse stichtingen” foundations or associations could manage up to 80 primary schools. These boards appoint the school heads and offer assistance with regards to general management, accounting and legal issues. Most primary schools are using learning methods that are offered by publishers. A learning method prescribes the activities that a teacher needs to do to achieve the learning goals. In this respect, primary school teachers

have limited possibilities to change their learning methods. There are only a few primary schools that experiment with student centric learning, although over 200 schools have implemented iPads in their classes. These devices generally support current learning methods of the publishers. Secondary schools (age 12-18). At age 12, the students make an important decision. At that age, students may opt for a school that offers general education or vocational education to become craft men like painters, carpenters, metal workers. General education is offered in three levels: middle, higher and pre-academic. Graduates from middle level general education may opt for further vocational education, higher level general education graduates are qualified to go to a level 2 university (4 years; bachelor) and pre university graduates can attend a level 1 university. Secondary schools are typically much larger schools. Most of them are independent institutions that employ a professional management staff. Most schools have the authority to change their learning methods but are still very much depending on publishers and methods. Teachers teach a specific subject (Geography, History, English, etc) and usually obtained a master degree in their subject. Teachers have also obtained a teaching qualification before they start teaching at a secondary school.

Table 3: Overview of the Dutch school system

Primary education yrs	Secondary education yrs	Tertiary education Yrs
Primary schools 8	Lower technical edu 4	Further technical colleges 4
General edu: middle 4	Further technical and general colleges 4	General edu: higher 5
Universities level 2 (bachelor) 4	General edu: pre academy 6	Universities level 1 (masters) 5

## Practices and organisations

### Teacher training and continued professional development

Teachers in primary education are graduates in pedagogy and have obtained a bachelors degree in educational sciences. These studies are offered by Level 1 and Level 2 universities, qualifying for Bachelor and Masters degrees. Teachers in primary schools teach all subjects. Teachers in secondary education often have a masters degree in their specific subject and completed pedagogical courses as well. School leaders support teachers in their professionalization by asking from teachers to write Personal Development Plans, which are central in the yearly performance interviews. Professionalization and training mostly takes place in company. Teachers also participate in internal and external networks for teachers. By law 10% of the time of teacher is reserved for personal professional education. The Dutch Institute for Masters in Education offers Masters and PHD courses for teachers in secondary education. Since February 2012, teachers can enroll themselves on a voluntary basis in the teacher register. To be able to do so, they have to meet certain quality demands, such as kind of teacher training and minimum number of teaching hours. This teacher register invites and supports teachers to work on their professionalization and personal development.

### School heads training and continued professional development



There are many training institutes for school leaders at universities and professional academies. Up till now, not many school leaders follow professional learning before becoming a school leader. Mostly, they take courses at the beginning of their career as a school leader. However, in primary education, this will be changing as a result of the new developed requirements for registration. For primary education, a proposal has been made for obligatory registration of school leaders and requirements for registration. These requirements are: • A training for school leaders based on the five new basic competences for school leaders. • Participation in continuous professional development. • Provable reflection on one's own professional practice. • Signing a code of conduct.

School leaders are trained in innovation and change management, usually project approach. Many schools use various tools, models and systems to improve their quality: EFQM, INK, IIP, etc. Next to project management skills, the Dutch government encourages school heads to visit conferences, seminars and join networks of school leaders to learn how to implement new policies. There will be a transitional period of five years for school leaders to meet these requirements. The most well known institute that offers school heads qualifications (masters degree) is the NSO in Amsterdam.

### **Innovation consulting**

There are a number of organization that offer consulting and support for innovations. Among them are:

- The Dutch principal association: The AVS is school leaders association offering legal assistance and consulting for innovation. AVS employs about 40 highly qualified professionals.
- The Dutch employers organization: The VO-Raad is an association that represents the majority of secondary school boards. Their aim is to improve quality of education. The VO Raad also negotiates working conditions with the Dutch government.
- CBE consulting. Organisation focussed on innovation in schools. Relatively small company with a relatively highly successful program: High Performance Schools
- APS. Organisation focussed on innovation in schools. Relatively large company with expertise on leadership, pedagogy and student centric learning
- KPC. Focuses on innovation of education. Relatively large organisation with a strong focus on student centric learning. This company occasionally works for the Dutch government on several research topics
- CPS. Organisation focused on quality of education. This organisation focuses on a few aspects of Lifelong Learning.

## 8.2 Policy environment

The Dutch government facilitates and controls schooling to a great extent: by law and finance, curriculum, state exams and publishing policies on a number of issues. The Ministry of Education and Science publishes policy papers, which are translated by the boards of school governors in a mission and vision for their schools. School heads disseminate this vision to the teachers and together school heads and teachers translate this to the school goals.

The policy imperatives for primary and secondary education are mainly focused on higher student achievements, especially with regard to literacy and numeracy (Ministry of Education, Culture & Science, 2007; 2008). Other focus areas are drop outs, innovation, security, inclusion, norms and values. The government has aligned its educational objectives in order to achieve a higher PISA rating in 2015. Currently, the government moves away from giving 'directives' and content in the curriculum are left to schools. The government advocates (Commissie Dijsselbloem) that educational innovation should be initiated by the educational social partners like the PO-Raad and VO-Raad (councils for primary and secondary education)

### Strategic Objectives

The defined strategic focus areas are:

- Core content (Languages and Maths) and innovation
- Individual talents (high performing students)
- Citizenship
- The role of the teacher
- Cost control

### Policies on key competencies in LLL

There is no direct reference to Lifelong Learning in the context that learners should be taught to become independent, lifelong learners. Instead, the Dutch government emphasizes its commitment to increased knowledge of languages and maths. The VO Raad do recognize that education should focus on facilitating and enabling the individual learner in order to decrease the drop out rates in secondary and higher education. Their key focus point are:

- Duration of the education will be based upon individual progress
- Organisation of education based upon knowledge and progress, not upon age and classes
- From the school perspective, there is a moderate to high awareness that Lifelong Learning is vital for the future. However, most school heads and teachers do not know how to implement this and a percentage of teachers also resist to change.

## **Policies on ICT in the learning process**

Main features of the local, regional and national policy documents and strategies concerning education policies on ICT in the learning process The Dutch government focuses on ICT in the learning process. The main focus is to support and improve current learning methods. There is no reference in innovative learning practices like student centric learning or flipping class rooms. There is however, a certain focus on the development of digital courses. The initiative Wikiwijs aims to enable and stimulate teachers to develop and share digital courses with their colleagues.

## **Policies on creativity and innovation**

Main features of the local, regional and national policy documents and strategies concerning education policies on creativity and innovation: Innovation is mentioned as one of the main focus areas of the Dutch government. However, there is no vision behind the innovation message. The most innovative aspects of the current educational policies are the implementation of the ICT platforms like Wikiwijs.

## **Policies on intercultural learning skills**

Main features of the local, regional and national policy documents and strategies concerning education policies on intercultural learning skills Intercultural learning skills is not mentioned as a separate strategic objectives of the Dutch government. The policies that recognise intercultural differences are primarily focused on reducing dropout rates and enabling students with special needs. Reducing dropout rates is seen as the best way to offer non-native persons with equal opportunities in the current society. ICT is mentioned as a vehicle to offer more personalized education. Teachers should be able to recognise different learning styles.

## **Level and kind of investment**

What level and kind of investment is currently being deployed into key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills? The Dutch government currently invests an additional 400 M Euros per year to improve education. This budget will be used to fund activities related to the following strategic objectives: • Core content (Languages and Maths) and innovation • Individual talents (high performing students) • Citizenship • The role of the teacher • Cost control

## **8.3 Past and current initiatives and projects in Schools**

The Dutch government encourages local initiatives. The below mentioned projects are all in initiated by the education field

## Digiwijs

The Dutch government focuses on ICT in the learning process. Digiwijs is one of the most important initiatives of the Dutch government. Digiwijs is a platform on which teachers publish and share electronic course materials with their colleagues. In May 2013 over 70.000 different courses are published on Wikiwijs. The aim of Digiwijs is to become the preferred community of innovative teachers and the platform for electronic content for all subjects and classes in primary and secondary education. Digiwijs is not focused on learners and can therefore not be compared with initiatives like Khan Academy

## www.Verschillenalskansen.nl

There is a debate how 21th century learning will look like but there are a few initiatives that focuses on student centric learning. The most well known initiatives are and [verschillenalskansen.nl](http://verschillenalskansen.nl) and [entreprenasium.nl](http://entreprenasium.nl). [Verschillenalskansen.nl](http://verschillenalskansen.nl) (differences are chances) is a school collective that focuses on individual students and their personal learning competences. Their shared understanding is Human Dynamics. Human Dynamics™ provides insight into the origin of differences between people, recognize these differences and uses this insight as the starting point of the improvement of educational processes.

## www.Entreprenasium.nl

The Entreprenasium collective focuses on 21th century learning like learning skills, creativity, citizenship, leadership and entrepreneurship. At Entreprenasium the students are in charge of their own education. They draft a self-designed learning path and combine it with building their own company during their school careers. Currently, the Entreprenasium collective consists of 12 secondary schools.

## Snappet

Snappet offers tablet computers that supports current learning methods offered by publishers. The Tablet includes electronic content and ultimately replaces school books in the class room. Snappet.org claims that over 200 schools are currently using tablets in their class rooms.

## De sterrenschool

Furthermore there is a movement called “the Star school”. The star school offers education that tailored to the needs of the parents and the children. De sterrenschool is a concept for primary schools The basic principles (stars) are:

- A sterrenschool offers education to that is tailored to the needs of parents. If parents work from 9 to 5, the sterrenschool offers education from 9 to 5. Parent may choose when to have holidays. They may even opt for 4 or 5 days education per week.
- A sterrenschool offers personalized education. Student and their personalized learning abilities are at the center of education
- A sterrenschool only employs academically educated teachers. A major focus is fluency in languages, reading and maths.
- A sterrenschool is an active member of the local community, offering their facilities to community members
- ICT is regarded as the back bone of education

## High Performance Schools

High Performance schools is an initiative of CBE. Participating schools are committed to become high performing schools. The main objective of the program is to realize individual potential of each student.

## Steve Jobs schools

This relatively new educational concept focus on lifelong learning. Its main goal is to prepare learners to the increasingly changing economies and society. Their purpose is to acquire learning skills, creativity, curiosity, an innovative attitude and flexibility. ICT and primarily Ipads (hence the name) are the back bone of this new educational concept. In August 2013, 10 schools will start with this innovative learning concept.

## Technasium

Technasium is an initiative to include more technical oriented courses in the curriculum of secondary school of higher and pre academic level. Its main objective is to encourage students to pursue a technical career. Technasium is an innovative approach to education, with open ended projects, individual research and design in an open lab environment. The courses encourage students to be independent, innovative learners. Teachers of the consortium work together and write and share courses among each other. In May 2013, about 80 secondary schools have implemented this project. [www.technasium.nl](http://www.technasium.nl)

## Cloud school

Cloud school is a project that is initiated by the VO Raad. It is an educational approach based upon personal learning styles built in an portal environment. The portal offers an personalized approach for learners and includes an ELO, a community that develops content and the already developed courses. It is a



 Education and Culture DG Lifelong Learning Programme	 QUALITY FOR INNOVATION IN EUROPEAN SCHOOLS	Q4i Quality for Innovation in European Schools Project N°: 527906-LLP-1-2012-1-ES-COMENIUS- CMP
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personalized approach and an alternative to the current, books based learning methodologies offered by publishers. Cloud School may be the most large scale project in the Netherlands. [www.cloudschool.nu](http://www.cloudschool.nu)

## 9. Portugal

### 9.1 National context

#### Population, economic and social characteristics

The educational system is divided into preschool (for those under age 6), basic education (9 years, in three stages, compulsory), secondary education (3 years, until 12th grade), and higher education (university and polytechnic).

The total adult literacy rate is 99 percent. Portuguese primary school enrollments are close to 100 percent. According to the OECD's Programme for International Student Assessment (PISA) 2009, the average Portuguese 15-year-old student, when rated in terms of reading literacy, mathematics and science knowledge, is placed at the same level as those students from the United States, Sweden, Germany, Ireland, France, Denmark, United Kingdom, Hungary and Taipei, with 489 points (493 is the average). Over 35% of college-age citizens (20 years old) attend one of the country's higher education institutions (compared with 50% in the United States and 35% in the OECD countries). In addition to being a destination for international students, Portugal is also among the top places of origin for international students. All higher education students, both domestic and international, totaled 380,937 in 2005.

Portuguese universities have existed since 1290. The oldest Portuguese university was first established in Lisbon before moving to Coimbra. Historically, within the scope of the Portuguese Empire, the Portuguese founded in 1792 the oldest engineering school of Latin America (the Real Academia de Artilharia, Fortificação e Desenho), as well as the oldest medical college in Asia (the Escola Médico-Cirúrgica de Goa) in 1842. The largest university in Portugal is the University of Porto. Universities are usually organized into faculties.

Institutes and schools are also common designations for autonomous subdivisions of Portuguese higher education institutions. The Bologna process has been adopted since 2006 by Portuguese universities and poly-technical institutes. Higher education in state-run educational establishments is provided on a competitive basis, a system of numerus clausus is enforced through a national database on student admissions. However, every higher education institution offers also a number of additional vacant places through other extraordinary admission processes for sportsmen, mature applicants (over 23 years old), international students, foreign students from the Lusosphere, degree owners from other institutions, students from other institutions (academic transfer), former students (readmission), and course change, which are subject to specific standards and regulations set by each institution or course department. Most student costs are supported with public money. However, with the increasing tuition fees a student has to pay to attend a Portuguese state-run higher education institution and the attraction of new types of students (many as part-time students or in evening classes) like employees, businessmen, parents, and

pensioners, many departments make a substantial profit from every additional student enrolled in courses, with benefits for the college or university's gross tuition revenue and without loss of educational quality (teacher per student, computer per student, classroom size per student, etc.).

### **Description of the types of education and training (formal and informal) that occur in a country**

In Portugal, the Ministry of Education and Science, has the responsibility for defining, coordinating, implementing and evaluating national policies for education, science and information society, articulating them with the policies of qualification and training. The Ministry performs this responsibilities via direct administration services of the State (central and peripheral services), indirect administration, advisory bodies and other entities. In the Autonomous Regions of the Azores and Madeira, the Regional Governments, via the respective Regional Secretariats for Education, are responsible for defining the national education policy to a regional plan and manage human, material and financial resources.

Pre-primary education is the first stage of the Portuguese education system and is aimed at children aged between 3 to 5 years old. In 2009, the universality of pre-primary education for all children over 5 years old was established, but attendance is not compulsory. The preschool network is provided by the state, private and cooperative bodies, private social solidarity institutions and by non-profit institutions.

Compulsory education begins at the age of 6 and lasts for 12 years. It encompasses Basic Education and Secondary Education. Basic Education lasts for 9 years and is divided into three cycles: the first cycle corresponds to the first four years of schooling; the second cycle corresponds to the next two years (these two cycles together correspond to primary education); and, the third cycle that lasts for three years and corresponds to Lower Secondary Education. The articulation of the three cycles is sequential and each cycle should complete and deepen the previous one, within a global perspective. Specific goals within each cycle are integrated into the overall objectives of basic education, according to their age and stage of development. Secondary Education lasts for three years and corresponds to Upper Secondary Education. It can be organized in different paths, comprising courses aiming the preparation for working life or further studies. The permeability between courses oriented to working life and courses geared to continue studies is guaranteed. Compulsory education is provided in public schools, private and cooperative schools. State-run schools are free of charge.

Higher Education is structured according to the Bologna principles to ensure a solid scientific and cultural preparation plus technical training that qualifies students for professional and cultural life while developing their capability to innovate and make critical analysis. Higher Education includes university and polytechnic education. University and polytechnic education is offered by public, private and cooperative institutions.

## Practices and organisations

In Portugal, qualified teachers have to have a Postgraduate Certificate of Education. The qualification is obtained after having attended and passed initial teacher training courses which are offered at Higher Education institutes and at universities and which are structured in conformity with teacher-education profiles. Such courses lead to a professional qualification at the level of a Master's degree according to terms laid down in the law governing vocational training for teachers in pre-primary schools and in compulsory and secondary education. With regard to the main policies and measures for developing the on-going training of teachers, the Ministry of Education has clearly wagered its strategic target on consolidating Portuguese teachers' competences and skills in Management and Leadership, mainly in terms of teachers' leadership positions. The vital role played by professional training programmes that are specifically aimed at satisfying the needs of the Portuguese educational system, has been fully acknowledged. Acting upon the clear, firmly-entrenched notion to upgrade educational human resources, the Ministry of Education has implemented several programmes by going through its Directorate General of Human Resources in Education in partnerships with different actors. These programmes are geared at school leadership training and target the Directors of schools or Groups of school as described further on (in A – 9.3.1.). Also worth mentioning is the Technological Education Plan (TEP) which, in 2010, was funded by the Human Potential Operation Programme (HPOP) falling within the National Strategic Reference Framework and covered by the State Budget. The TEP 2010 Training Programme was globally applied to all public education establishments that did not cater to Higher Education and involved 90% kindergarten teachers and teachers in compulsory and secondary education. Its aim was to train about 130,000 teachers over a 60-hour course spread over a 4-year period: the teachers taking the course had to obtain a pass in 4 short-term courses of 15 hours each covering 4 nuclear subjects on the didactics of using Information and Communication Technology in the classroom.

### Professional Development of Teachers, Trainers and School Leaders

Currently in Portugal, an action plan is being drawn up in order to guarantee the quality, attractiveness and relevance to the job market of education and vocational training via partnership with enterprises and other bodies. This plan includes a revision of the initial teacher training model for primary and secondary education in order to improve quality, as well as redefining the system of access to the teaching profession. In parallel with this revision, Portugal has been consolidating pedagogical and organisational autonomy of schools. This is particularly important in terms of curricular development. These schools implement the curriculum and complete it, taking into account the established general principles. Its application should be tailored to the characteristics of both students and schools. Education should accept and create the right conditions for all students, both to remedy learning difficulties and to develop student capacities. The aim is for every school to value the experiences and collaborative practices that lead to improved teaching. To this end, Portugal aims to implement the principles enshrined in the regime of autonomy, coordinating it with curriculum development, providing greater flexibility in terms of

organising teaching activities, increasing efficiency in how they are distributed and improving academic outcomes, particularly via the following measures:

- Conceding hour credits, according to factors such as the efficient management of resources and the number of classes, while considering the academic progress and outcomes achieved;
- Being flexible regarding the duration of classes according to each school's individual criteria, with classes no longer having to last 45 minutes (or multiples of 45 minutes);
- Establishing a minimum time for each subject and a total maximum workload, giving schools the autonomy to distribute lessons so as to facilitate patterns or solutions that allow schools to achieve pre-established objectives in certain subjects;
- Making it possible to offer complementary cultural curricula with a flexible workload, to be used with school credit, specifically with Civics, Health Education, Financial Education, Media Education, Road Education, Consumer Education, Entrepreneurship Education and others.

## 9.2 Policy environment

### Digital Portugal Agenda

On 20th December, 2012, the new national Digital Agenda (Digital Portugal) was approved by the Council of Ministers. This aims to contribute to the development of the digital economy and the knowledge society, thus preparing the country for a new economic model focused on innovation and knowledge and a new industrial policy that serves as a basis for providing new products and services with greater added value and ones more geared towards international markets. The Digital Portugal Agenda foresees major involvement from the private sector, particularly in the field of information technology and communication (ICT). This specifically involves six areas:

- i) Access to broadband and the digital market;
- ii) Investment in research and development (R&D) and innovation;
- iii) Improving digital literacy, qualifications and inclusion;
- iv) Combating fraud and tax, contributory and payment evasion;
- v) Dealing with challenges in society;
- vi) Entrepreneurship and internationalisation of the ICT sector.

Due to the importance of certain projects in the fields of science and education, the following intervention areas are highlighted:

### Investment in Research and Development (R&D) and Innovation

Consolidating research and innovation capacity in ICT

Consolidating research and innovation capacity in ICT in cooperation with the scientific system and businesses in a highly competitive environment of



internationalization. Supporting and encouraging research and innovation in emerging areas, such as green technologies for an efficient use of ICT for more sustainable development, as well as promoting applied research, via cooperation between research centres and companies in the ICT sector.

## E-Science and Internet of the future

Encouraging the development of tools that support the activities of the scientific community and innovation, such as the national platforms provided by the science, technology and society network (STSN) with distributed services for research and higher education, which involve major economies of scale. Supporting distance collaborative work, via supercomputing, GRID computing (INGRID - National Grid Initiative), voluntary scientific computing (IBERCIVIS), access to scientific digital libraries and free access repositories, R&D project results, as well as other academic and data publications. Promoting R&D in the area of cloud computing.

## Encouraging the development and provision of advanced services

Promoting the development of production and provision of applications with content and services that add economic value, taking advantage of the potential of next generation networks (NGN), particularly applications that involve both video and interactivity, such as e-Learning, e-Public-Services, e-Health, e-Education, ICT applications that monitor and measure environmental challenges (new generation of Internet-based services and applications) and the increase of online services in non-higher education, encouraging greater use and development of NGN.

## “Internet of Things”

Promoting R&D on the "Internet of Things", as well as a national industry of "Things connected to the Internet", while promoting the creation of public infrastructure for things connected to the Internet in different areas, such as "Smart Cities", "Smart Transport", "Smart Energy Networks" and "Smart Health Care." The interconnection with private Portuguese business infrastructure will also be promoted, stimulating a market for the Internet of interoperable things on a European level.

## Dealing with challenges in society: Improving Education

### Consolidating the unified education network

Integrating MEC and STSN schools' data network in order to establish a communications platform for common data via: the extension of the STS network to yet to be connected MEC bodies, benefiting from high-speed links of the STSN, both for national operators and for Europe and the rest of the world via the GÉANT European network, from contracting services for the access network of schools to be included in the external connectivity of the STS network. Developing a unified voice network for the MEC, interconnecting the data network, converging fixed-line and

mobile communications and interconnecting with other public administration voice network systems

## The Education Cloud

Supporting the creation of a shared services platform for MEC schools and bodies, using cloud computing technologies, in order to provide the centralised availability of infrastructure components, standard platforms and systems, as well as specific MEC applications which facilitate the introduction of transversal systems and procedures for the collection, processing and availability of information. Promoting desktop virtualisation, both in MEC bodies and in schools, in order to reduce the costs of replacing equipment and licensing, as well as the on-going and sustained adoption of open-source software in MEC schools and bodies, both at work-station and server level.

## Improving digital literacy, qualifications and inclusion

### Developing competencies for the digital economy

Promoting the use of ICT in education and training. Developing advanced skills and talent for the digital economy, particularly at top level and with the appropriate expertise for the needs of global competitiveness. Adapting digital competencies to emerging areas, such as green technologies, smart grids, cloud computing, Internet security and cultural and creative industries. Promoting the development of multidisciplinary competencies, using ICT in a transversal fashion within the different scientific areas. Fostering partnerships between ICT companies and business associations, in order to promote the introduction of ICT in the business community, increasing business capacity and capacity-building in the business community and the community of workers in SMCs. One of the projects within this sphere will be the Digital Academy, which aims to give trainees practical and advanced skills in the digital management of business, including e-commerce, digital marketing, product development and digital services, digital property and law, technology and entrepreneurship.

### Promoting digital inclusion and regular use of the Internet

Promoting the use of ICT for social inclusion (ICT and Society), in order to allow greater penetration of technologies and the digital economy within the population and consolidate digital citizenship, as well as for citizens in remote areas, with low levels of education, the elderly or those with special needs, from a lifelong learning perspective.

### Promoting the widespread creation and digitalisation of content

Encouraging the creation and development of content in Portuguese language. Interoperable technical formats will be adopted in accordance with open standards to

make digital content openly available, in order to ensure the necessary quality of content to be digitalised.

#### Promoting the availability and use of e-Books

Promoting policies for the lending of school and technical e-Books; something which is already happening in some countries. This lending policy will lead to cost reductions for readers, promoting the adaptation of works to groups with special needs and, in addition, will discourage the violation of copyright, due to the limited expenditure involved.

Defining a policy of accessibility to Portuguese digital platforms and content on the Internet

Encouraging legislative measures on the adoption of accessibility guidelines applied to the web that foster universal access to available content and platforms, involving the following key sectors: central and local administration, educational institutions, online banking, utilities, media (television, radio, newspapers), e-commerce (large commercial chains, including hotels).

### **Entrepreneurship and the Internationalisation of ICT**

#### Consolidating the internationalisation of ICT

Promoting improvements to aspects of international trade with third-party countries and the governance (involving different players) of the open Internet, as well as consolidating international cooperation in R&D and innovation, particularly with African Countries of Portuguese Official Language (Países Africanos de Língua Oficial Portuguesa – PALOP) for the dissemination of Portuguese language on the Internet. Some of the goals of this initiative include the internationalising of ICT businesses, encouraging excellence in Portuguese science abroad and using researchers abroad as internationalisation platforms for Portuguese products. The aim is also to encourage the development of consortia and complementary business clusters in the areas of services, solutions and products that have great potential for internationalisation (e-Gov, education, health, mobility, etc.). Considering the abovementioned objective, a cooperation protocol was signed between the Ministry of Economy and Employment (Ministério da Economia e Emprego – MEE), of Ministry of Foreign Affairs (Ministério dos Negócios Estrangeiros – MNE) and MEC and E-Xample - Complementary Business Cluster of the teaching, learning and training technologies industry - for cooperation in the field of entrepreneurship, innovation, industrial development and internationalisation in the sector, in order to maximise the benefits of information and communication technologies (ICT) and electronics and the digital economy in Portugal. This encourages the development and the use of the digital economy by citizens, businesses and the state, stimulating the creation of products, services and competitive technological solutions that are geared towards international markets.

## Enhancing Creativity and Innovation, Including Entrepreneurship, at all Levels of Education and Training

Partnership with Business, Research, Civil Society Impulso Jovem Strategic Plan, which is based on three key areas:

- Professional internships;
- Support for recruitment and entrepreneurship;
- Support for investment.

Professional internships aim to ensure that the most qualified young people internalize skills within places of employment by providing them with professional integration or reintegration, as well as participation in vocational training. They are provided in a range of areas, such as social economy, agriculture, youth and sports associations, as well as companies with investment projects in the areas of innovation, industrialization and internationalization. The employment passport gives priority to applications from companies that operate in the tradable goods and services sectors, so as to increase export capacity and contribute to the balance of trade. Integration contributes to job creation after the internship, when recruitment occurs via a non-fixed-term contract. Recruitment support, via a social security contribution refund, aims to reduce the costs associated with hiring young people who have been unemployed for over 12 months, in return for a full-time employment contract. Entrepreneurship support aims to support the implementation of business ideas by young people, providing a possible alternative to working for others. By using some existing tools and creating others, investment support aims to support Small and Medium-sized Companies - SMC, regarding expansion and the creation of youth employment. The «Impulso Jovem» Strategic Plan operates on both sides of the employment market and creates the right conditions for companies to generate skilled and lasting jobs, overcoming current financing constraints, while adjusting their production pattern to the new sustainable economic paradigm desired. This Plan aims to create job opportunities for young Portuguese people, providing certified training or on the job training, always with the purpose of a lasting work relationship later in order to reverse the trend of rising structural unemployment amongst young people. Within this context, the implementation of mechanisms and measures that encourage recruitment and young entrepreneurship is essential, facilitating access to finance for small and medium-sized companies, supporting their innovation and internationalization. The funding for the «Impulso Jovem» Plan adheres to the strategic focus defined by the reprogramming the National Strategic Reference Framework (Quadro de Referência Estratégica Nacional - QREN), ensuring that a part of the support provided is geared towards the convergence regions (North, Centre and Alentejo), thereby contributing to the reduction of regional imbalances and social and national cohesion in the country.

### Short-Term Training Units

The National Qualifications Catalogue (Catálogo Nacional de qualificações - CNQ) will be able to include Short-Term Training Units (Unidades de Formação de Curta

Duração - UFCD) of 10 hours as part of a pilot project. This will enable it to respond to a recurring request from employers and sitting members of the Standing Committee for Social Dialogue, to create individual and more flexible qualification pathways, adjusted to the development of skills considered critical for the competitiveness and modernization of the Portuguese economy. Later, an assessment of this pilot project will be carried out by the National Agency for Qualification and Vocational Education (Agência Nacional para a Qualificação e o Ensino Profissional - ANQEP), the managing body for the CNQ, with a view to introducing any adjustments necessary and possibly extend this measure to other areas of education and training within the CNQ. All of these UFCD are independently accredited and count towards the completion of the qualification pathways leading to a qualification from the National Qualifications Framework.

### Youth Scientists and Researchers

MEC established a partnership with the Youth Foundation (Fundação da Juventude) in view of the contest "Youth Scientists and Researchers". This contest has a European scope and is developed in Portugal since 1992. It aims to promote the ideals of cooperation and interchange among scientists and researchers, as well as to foster the emergence of young talents in areas such science, technology, research and innovation. In Portugal pupils enrolled in basic and secondary education, as well as in the first year of higher education can participate in the contest. Program for Young Students in Higher Education in Business (Programa de Estágios de Jovens Estudantes do Ensino Superior nas Empresas – PEJENE) The Internship Program PEJENE aims to create a direct relationship between Universities and Enterprises (Accessed 4 March 2013). This nationwide program internship, which begun in 1993 and is now in its 20th edition, allows young students to access a recognized professional experience, facilitating their subsequent entry into the labor market. The PEJENE is sponsored by the Youth Foundation (Fundação da Juventude), with the special participation of the Portuguese Youth Institute (Instituto Português da Juventude - IPJ) and the co-promotion of Institute of Employment and Professional Training (Instituto de Emprego e Formação Profissional - IEFP), Institute of Support to Small and Medium Enterprises and Innovation (Instituto de Apoio às Pequenas e Médias Empresas e ao Investimento - IAPMEI) and Insurance Tranquility (Companhia de Seguros Tranquilidade). The PEJENE is addressed to Higher Education students enrolled in public, private and/or cooperative schools, on the final years of the degrees of Licenciatura (1st Cycle), Mestrado (2nd Cycle), Mestrado integrado programme (integrated master programme), and covers all the study areas. The internships (unpaid) are held annually for a period of 2 or 3 months, take place during summer interruption of the academic activities, which coincides with the extra needs of employers in terms of human resources in the enterprises.

### FCT Researcher Programme (Programa investigador FCT)

The "FCT Researcher Programme", regulated by Decree-Law no. 28/2013, 19th February, focusses on research in host institutions in Portugal by the youngest and most competitive PhD holders. Enjoying full autonomy in how their research is



conducted, it allows the researcher, from the outset, direct involvement in the National Scientific and Technological System (Sistema Científico Tecnológico Nacional - SCTN), fostering mobility and strengthening host institutions, enabling them to attract this type of researcher without investing their own resources. This programme aims to keep the best researchers currently in Portugal and attract others from abroad who wish to contribute in this way, as well as providing researchers with the right conditions to develop professionally and the necessary stability and financial planning of their scientific endeavour. The "FCT Researcher Programme" is one of the Foundation for Science and Technology (Fundação para a Ciência e a Tecnologia, I.P. – FCT) support mechanisms for the SCTN.

### Strategic Programme of International Partnerships in Science, Technology and Higher Education

In terms of partnerships developed in Portugal, we must refer that by the end of 2006, and for a 5 year period ending in 2011, the Portuguese Government signed 3 agreements, to create a strategic programme of international partnerships in science, technology and higher education - due to its success these programmes are still valid and going on. By September 2007 the first doctoral and advanced studies programmes were officially launched, bringing together several Portuguese universities and leading universities worldwide, including the Massachusetts Institute of Technology (MIT), Carnegie Mellon University (CMU) and the University of Texas at Austin (UT Austin). These programmes facilitated the creation in 2007 of effective thematic networks involving a large number of Portuguese institutions with the objective of stimulating their internationalisation through advanced studies projects and sustainable schemes to stimulate new knowledge and exploit new ideas in collaboration with companies and internationally renowned institutions, as follows: The MIT Portugal Programme offers PhD, Master's and Advanced Studies programs. MIT Portugal's doctoral programmes are awarded jointly by the participating Portuguese institutions in each area, and take three to four years to complete. MIT collaboration in supervision and teaching is a strong feature of these programmes, as are reciprocal student visits to MIT for some students who have been awarded FCT-MIT Portugal PhD grants. The Master's programme (Bologna 2nd cycle) brings together the tradition and integrity of an MSc with the insights of an MBA. Curriculum development, teaching and supervision are organized jointly by the Portuguese participating universities and MIT. Executive Master's (Bologna 3rd cycle) are one-year professional programmes that are awarded by the participating Portuguese institutions in each area along with reciprocal student visits. The programmes are oriented to people already pursuing professional careers in relevant fields. Through the joint programme with MIT, co-operation with the Sloan Management School was strengthened through an international MBA programme, "Lisbon MBA". This involves co-funding from seven major Portuguese companies and banks in a way that will stimulate new research and the quality of education in management sciences in Portugal.

The Carnegie Mellon-Portugal Programme supports faculty exchange programmes, in which academics from Portuguese universities can spend at least one term

working in research and education at Carnegie Mellon to experience the culture of a top United States university. Carnegie Mellon professors are also given the opportunity to spend time in Portugal to engage in teaching and research activities with local HEI and research labs. The Programme involves post-Doctoral training, dual professional Masters and PhD programmes by Portuguese institutions and Carnegie Mellon University. Through various funding sources a range of scholarships, fellowships, and stipends are offered on a competitive basis, to qualified students as a way to help recruit top students. These are open to all applicants. For masters' students, fellowships to cover partial tuition costs may be available to qualified students in the Information and Communication Technologies Institute's - ICTI, program. These students may also benefit of additional living stipends in addition to the tuition offsets. For doctoral students, some tuition offsets are also available, and many programs also offer modest living stipends. Under the University of Texas in Austin-Portugal programme, "Collaboratory for Emerging Technologies, CoLab" was launched, in March 2007. The programme offers a variety of educational opportunities for Portuguese students and industry professionals ranging from lectures and workshops to a dual doctoral program and post-doctoral fellowships. The main objective of this collaboration was, and continues to be, to strengthen Portuguese scholarly research, graduate-level education, industrial links, and academic entrepreneurship. From the start, this collaboration focused on building strong and mutually beneficial scholarly relationships among Portuguese and UT Austin faculty and students in three academic areas: Digital Media, Advanced Computing, and Mathematics. Emphasis was focused on establishing collaborative research, faculty and student exchange, and capacity building through conferences, workshops, and academically-related events. By the same time, was signed a Memorandum of Understanding with the Fraunhofer Gesellschaft Institute for the establishment, in Portugal, of the first Fraunhofer Institute in Europe outside Germany through the recently established Fraunhofer Portugal Research Association. In 2009, the Portuguese Government decided to include another American university, in the area of health, by signing an agreement with the Harvard Medical School. Therefore, the Harvard-Portugal Programme was created, a research program directed at strengthening the national capacity to produce new translational and clinical knowledge with impact on specialized medical education and the practice of clinical medicine. It will be developed in close cooperation with teams from Harvard Medical School and will encompass networks to be formed between Portuguese schools of medicine and medical sciences and major national laboratories and research centers working in translational and clinical research. Participants in the research grants will include Portuguese and Harvard principal investigators, research fellows, clinical fellows, medical and graduate students, and undergraduate students. The program will include joint Harvard-Portugal workshops, retreats, and symposia. The programme also implies the launching and streamlining of post-graduate medical training, including Junior and Senior Clinical Research and Career Development Awards for Portuguese MD trainees. The lines of action will be launched on an entirely competitive basis at the national level, respectively for i) the identification and selection of research projects and networks; ii) the selection of MD trainees for post-graduate programs; iii) the respective training offered at the national level; and iv) the systematic review and production of educational material by

specialist teams in Portuguese medical schools. The International Iberian Nanotechnology Laboratory (Laboratório Ibérico Internacional de Nanotecnologia - INL), implemented in the Portuguese city Braga, was created through an international treaty between Portugal and Spain, which was signed at the end of 2006. The INL is the first research laboratory set up under international law in the Iberian Peninsula and is also the first institution worldwide explicitly focused in nanotechnology. It is expected to achieve a reputation as an international institution of excellence in application areas of food and water quality, environmental monitoring and nanomedicine. This Laboratory was conceived to host about 200 researchers from all over the world, and a total of 400 people, based on an annual investment and operational budget of around 30 million Euros funded equally by both participating countries. The developments of this Laboratory will also imply strong links with industry and is intended to attract the membership of more European countries and countries of other continents. It should be referred that Portuguese higher education institutions (HEI) also have established partnerships with other HEI or research centres, many of which may imply mobility of students, researchers and academic staff.

## Entrepreneurship

The modernisation of higher education in the last years has been increasingly based on social responsibility, in order to support the active participation of students in society, while simultaneously developing their academic activity. Portugal has aimed at reinforcing the conditions for students to be able to develop part-time professional activities in the institutions where they are studying, as well as helping them to enter the labour market. In order to understand the employment and professional paths for graduates in recent years a clear framework that collects and distributes information to HEI has been developed. In collaboration with the Portuguese Institute for Employment and Professional Training (Instituto do Emprego e Formação Profissional - IEFP) a report has started to be issued each semester with information regarding those that are enrolled in the employment offices that have a higher education degree, to help students and their families make more informed choices. In order to prepare for the future and to create ties between employers and HEI, it is necessary to stimulate in Portugal intergenerational trust that will promote the qualification of the population as well as social and economic development. This should be done in order to make way for the future that our youth represents, and secure the relevance of knowledge and education for that future. There must be co-responsibility between HEI, employers and the youth to establish bridges, create networks, find opportunities and bring forward new initiatives.

## **Transversal Key Competences, Entrepreneurship Education, e-Literacy, Media Literacy, Innovative Learning Environments**

### Citizenship education

Citizenship is maintained as an educational goal, but not as an obligatory and isolated subject, and it is made more transversal.

## Creativity & Innovation

Competences in technology transfer and commercialization have been systematically developed throughout the country and, today, most of the Portuguese universities, associated laboratories and research institutions consider specialized technical support fostering technology transfer and commercialization. This movement has recently been strengthened through the University Technology Enterprise Network (UTEN), which has been oriented to emphasise technology transfer and commercialisation at an international scale. This initiative is promoted and supported by the Foundation for Science and Technology (Fundação para a Ciência e Tecnologia - FCT), in close collaboration with the Council of Rectors of Portuguese Universities (Conselho de Reitores das Universidades Portuguesas - CRUP) and the Portuguese Industrial Property Institute (Instituto Nacional da Propriedade Industrial - INPI) and involving strategic partnerships with leading institutions worldwide. UTEN has evolved over the past four years and its mission has being strengthened to help build a professional, globally competitive and sustainable technology transfer and commercialization network in Portugal oriented for markets worldwide.

## Programme to Combat School Failure

The early detection of students with learning difficulties, combined with better rationalisation and consolidation of programmes to combat school failure and social exclusion, will also help to increase the student success and reduce the Rate of Early Leaving of Education and Training Systems. The Government is currently assessing the results of a set of existing measures and aims to continue the educational programmes developed in Educational Priority Areas. The aim is to identify best practices and include them in a coherent and flexible programme and setting up support/funding for schools with the definition of objectives to be met.

## TEIP3 Programme

TEIP 3 Programme was created in September 2012 (link para o Despacho anexo) following TEIP 2 Programme as well as other support measures target at students from socio-economically disadvantaged areas and aiming to be an answer to their needs and expectations. Main objectives of TEIP 3 Programme:

- Improve the quality of learning, reflected on the students' achievement;
- Fight against indiscipline, early school leaving and school absence;
- Create conditions for guidance learning and qualified transition from school to working life;
- Promote articulation among school, social partners and training institutions from the education territory.

## Programa Mais Sucesso Escolar - PMSE

The programme aimed at maximizing compulsory school completing rates and to improve the quality of education by investing in multi-year or cycle-level educational

strategies. It consists of strengthening student learning in the subject areas where high underachievement has been diagnosed, by reorganising the time allocated to a given subject area, and through differentiated pedagogy. To participate in PMSE, schools had to apply to the Ministry of Education and Science (Ministério da Educação e Ciência- MEC) by presenting a detailed plan of strategies to improve the outcomes of students likely to be retained. In this plan, schools also had to commit to lowering retention rates by one third each year, for four years. To make the plan feasible, the MEC would pay for additional teaching time for the implementation of the organizational measures and would give schools autonomy to manage their resources each year. Finally, the MEC also committed to providing a team of technical and academic experts to advise on aspects of implementation. Monitoring mechanisms in place, or under development: The programme is regularly assessed by the MEC. The MEC commissioned a study to an University aiming at evaluate the program. The goal of this study was to design an evaluation that would provide the necessary empirical evidence for policy-makers to make informed choices regarding the program. To do so the first two years of impact of PMSE were evaluated on a varied list of indicators, using multilevel modeling and an empirically-matched control group of schools that applied for the program and did not get it. Indicators included school success, success in high-stakes exams at the school and student level, cohort and cycle survival, and alternative education paths. In Portugal, indicators of school success regulate students' academic life, including students' year-to-year transitions and performance on specific disciplines. MEC also committed to providing a team of technical and academic experts to advise on aspects of implementation and assessment.

### Vocational Training Courses

The creation of a pilot project that aims to offer vocational training courses in primary and lower-secondary education (Ordinance no. 292-A/2012, 26th September). This aims to fully meet the fundamental needs of students and ensure the inclusion of all in education. These courses should ensure equality of opportunity, providing adequate and flexible alternatives that prepare young people for life by providing them with tools that allow them to deal with the future, as well as the challenges of the job market. The introduction of these courses also aims to develop basic schooling, promoting student participation in school activities, the assimilation of the rules of teamwork, the spirit of initiative and sense of responsibility, helping young people to acquire knowledge and develop abilities and practices that facilitate future integration into the job market. The length of these courses should not be fixed and should be tailored to the skills profile of the students on each course. When the student chooses this educational path, the aim is for their needs and expectations to match the school's educational projects and the features of the respective economic and social fabric. In addition, any student who attends these courses can return to regular education at the beginning of the following study cycle, after completing the 6th and 9th year final exams. The courses are geared towards students from 13 years old who are not well adapted to regular education and seek an alternative, particularly for those who have had to repeat a year twice in the same study cycle or three times in different cycles. Being recommended for these courses should occur



after vocational assessment by school psychologists, where this is the most appropriate match to the student's training needs. Access to these courses is not compulsory and requires parental consent.

Basic Skills (Literacy, Mathematics, Science and Technology), Languages

In 2012, as part of the Portuguese Curriculum Structure Review, measures were implemented that focussed on three main areas:

- The updating of the curriculum, particularly via the reduction of curricular dispersion;
- Improved monitoring of students, with better evaluation and the early detection of problems;
- A crucial increase in school autonomy, in terms of managing curriculum and greater freedom to choose training and education provision.

The reduction of curricular dispersion is achieved by the consolidation of main subjects, such as Portuguese, Mathematics, History, Physics and Chemistry and Natural Sciences. It is also achieved via promoting the teaching of English, making it compulsory subject for a minimum of five years, maintaining the provision of other Foreign Languages, as well as the Expressions. Citizenship is maintained as an educational goal, but not as an obligatory and isolated subject, and it is made more transversal. This revision allows schools to consolidate autonomy in terms of pedagogy and organisation, endowing them with decision-making capacity in continuity and harmony with that of the Ministry. The following measures were taken within the context of primary and secondary education:

- Consolidation of main subject areas;
- Making the identity of the subjects that are part of the Expressions much clearer (Visual Education, Musical Education, Physical Education and Technological Education);
- Guaranteeing more consolidated learning of English, making it a compulsory subject for a minimum of 5 years;
- Consolidating the transversal nature of Citizenship, creating syllabus content and guidelines but not making it a compulsory subject.

The following measures were taken in the 2nd cycle of primary education:

- Substituting Visual and Technological Education for Visual Education and Technological Education, each with its own programme taught by one teacher per subject;
- Experiments in Natural Sciences to be maintained and done with the entire class.

The following measures were taken in the 3rd cycle (lower-secondary education):

- Investing in scientific knowledge via the consolidation of hours teaching experimental sciences;
- Splitting class for experimental sciences via the alternation between Natural Sciences and Physics and Chemistry has been stopped;
- Providing a subject in the 7th and 8th years chosen by the school as part of its educational project;
- Improving social and human knowledge, consolidating the number of hours teaching History and Geography;
- Bringing ICT teaching forward to the 7th year, offering younger students safe and appropriate use of digital resources and providing conditions for universal access to information;
- Maintaining a second foreign language;

The following measures were taken in upper-secondary education:

- Consolidating the teaching of Portuguese, with a focus on improving students' oral and written expression;
- Maintaining the consolidated workload of biennial subjects Physics and Chemistry and Biology and Geology;
- Maintaining two annual subject options.

In parallel, Portugal is taking measures regarding more extensive curriculum revision, such as:

- Defining clear, rigorous, measurable and assessable objectives via new curricular goals and a revision and eventual reformulation of the program;
- Updating the range of options for specific training in upper-secondary education, taking into account further studies and the needs of the job market;
- Consolidating and improvement of vocational and professional provision;
- Improving academic and vocational guidance.

**Bilingual Schools Project** – A recent pilot initiative in early bilingual education implemented in the 1st cycle of primary in 8 school clusters at national level. It consists of delivering part of the curriculum through the medium of the English language since the beginning of compulsory education.

### Curricular goals

The curricular goals establish what can be regarded as the essential learning to be undertaken by students in each year of schooling or cycle of primary and lower-secondary education. As a reference point for teachers and parents, the goals help to identify the means necessary for students to develop the skills and acquire the knowledge which is indispensable to pursuing their studies and to the needs of today's society. Curricular goals are an initiative of the Ministry of Education and Science (Ministério da Educação e Ciência - MEC), which have emerged as a consequence of the abolition of the "National Curriculum of Compulsory Education – Essential Competencies" (Dispatch no. 17169/2011, of December 12). Together with

the current programmes for each subject, the goals constitute the fundamental reference points for the development of education: they clarify the priorities in each programme, define the knowledge to be acquired and the skills to be developed by students in different school years (Dispatch no. 5306/2012, of April 2). The drafting of goals is grounded on scientific fundamentals and studies, and takes into account goals that have been established in countries with good levels of performance. In this context, the goals now being presented are those regarded as the essential learning for students in each subject area, for each school year, or where required, for each cycle. They highlight the teaching objectives for the current programmes and therefore constitute a standard document to be used by teachers. As guiding principles it has been established that, because they are specific to each subject area, these goals should identify the performance associated with the knowledge to be acquired and the skills to be developed, while respecting the order in which they are to be acquired. There has been a concern to formulate them clearly and precisely in order that the teachers know exactly what it is the student should be learning. On August 10, of 2012, the Minister of Education and Science approved the new curricular goals (which replaced the previous "Metas de Aprendizagem" - Learning goals) for Portuguese, Mathematics and Technology of Information and Communication for all Basic Education. On 16 April 2013 new curricular goals for History and Geography of Portugal and Natural Sciences for 2nd cycle of basic education, and for History, Geography, and Natural Sciences for the 7th and 8th grades of 3th cycle of basic education, as well as for Physics and Chemistry for 3rd cycle of basic education, were approved by the Minister of Education and Science through Dispatch no. 5122/2013.

### Professional Development of Teachers, Trainers and School Leaders

Currently in Portugal, an action plan is being drawn up in order to guarantee the quality, attractiveness and relevance to the job market of education and vocational training via partnership with enterprises and other bodies. This plan includes a revision of the initial teacher training model for primary and secondary education in order to improve quality, as well as redefining the system of access to the teaching profession.

In parallel with this revision, Portugal has been consolidating pedagogical and organisational autonomy of schools. This is particularly important in terms of curricular development. These schools implement the curriculum and complete it, taking into account the established general principles. Its application should be tailored to the characteristics of both students and schools. Education should accept and create the right conditions for all students, both to remedy learning difficulties and to develop student capacities. The aim is for every school to value the experiences and collaborative practices that lead to improved teaching. To this end, Portugal aims to implement the principles enshrined in the regime of autonomy, coordinating it with curriculum development, providing greater flexibility in terms of organising teaching activities, increasing efficiency in how they are distributed and improving academic outcomes, particularly via the following measures:

- Conceding hour credits, according to factors such as the efficient management of resources and the number of classes, while considering the academic progress and outcomes achieved;
- Being flexible regarding the duration of classes according to each school's individual criteria, with classes no longer having to last 45 minutes (or multiples of 45 minutes);
- Establishing a minimum time for each subject and a total maximum workload, giving schools the autonomy to distribute lessons so as to facilitate patterns or solutions that allow schools to achieve pre-established objectives in certain subjects;
- Making it possible to offer complementary cultural curricula with a flexible workload, to be used with school credit, specifically with Civics, Health Education, Financial Education, Media Education, Road Education, Consumer Education, Entrepreneurship Education and others.

## 10. Romania

### 10.1 National context

#### Population, economic and social characteristics

##### Brief description

**Population** According to preliminary data from 2011 census, Romania's population is 19,042,936. Like other countries in the region, its population is expected to gradually decline in the coming years as a result of sub-replacement fertility rates. In October 2011 Romanians made up 88.6% of the population.

Romania recorded in 2002 - 2011 the most drastic population decline across the European Union. From 21,680,974 inhabitants in 2002 to 19,042,936 people in 2011, meaning a decline of 12%. The total population of Romania is expected to decline significantly by almost 16% until 2050 as a result of low birth rates and a high level of net emigration.

**Economy** Romania has a developing, upper-middle income market economy, the 11th largest in the European Union by total nominal GDP and the 8th largest based on purchasing power parity. Romania entered the 1990s a relatively poor country by European standards, largely a result of the failed economic policies of Nicolae Ceaușescu in the 1970s and of the failures of privatization in Romania during the 1990s, which decreased the GDP by almost 50% and ruined the industry because of corruption. Until 2009, Romanian economic growth was among the fastest in Europe (officially 8.4% in 2008 and more than three times the EU average)[<http://www.balkaninsight.com/en/page/romania-home>]. The country is a regional leader in multiple fields, such as IT and motor vehicle production. Bucharest, the capital city, is one of the largest financial and industrial centres in Eastern Europe. Romania was heavily affected by the global financial downturn and gross domestic product contracted by 7.2% in 2009, forcing the government to enact harsh austerity measures and borrow heavily from the IMF. The country's economic contraction continued in 2010 at a rate of 1.2%, however the GDP grew again in 2011 by 2.2% and continued grow in 2012 by 0.7%. Forecasts predict a further growth of 1.6% in 2013 and 2.2% in 2014. According to Eurostat data, the Romanian PPS GDP per capita stood at 46% of the EU average in 2010]. In March 2013, the net average monthly wage in the country was €387 - one of the lowest in the EU. Inflation in 2010 was 6.1%. Unemployment in Romania was at 7% in 2012, which is very low compared to other middle-sized or large European countries such as Poland, France and Spain. General government gross debt is also comparatively low, at 37.8% of GDP, and the government budget deficit is at -2.7%.

**Social security** The unemployment rate in Romania has been relatively low in recent years and stands at around 5% in 2011. In the late 2000s, nearly 10% of the population were in absolute poverty and of these, 90% live in rural areas. By the first quarter of 2011, the average monthly household income is 2,318 lei (equivalent to



approximately €532). The difference between countryside and urban area may vary; the income is 36% higher in the urban areas than in the countryside. The minimum monthly guaranteed income is 750 lei (€172). In 2010, the average monthly pension in Romania was 734 lei, or €170. The current average retirement age is 63 years for women and 65 years for men. Many of the Romani people in Romania have no identity cards and are therefore excluded from the social benefit systems, schools and health care. Social welfare in Romania is coordinated by the Romanian Ministry of Labor, Family and Social Protection. The system is funded by the taxpayers. There are roughly 50 types of welfare a Romanian citizen can receive. At the moment, it is estimated that 5,9 million Romanians (or half of the active population) are being given a form of welfare. In 2012, the budget granted for the social welfare was of 13.93 billion RON.

### **Description of the types of education and training (formal and informal) that occur in a country**

#### **Brief description**

The Romanian educational system is based on a tuition-free, egalitarian system. Access to free education is guaranteed by Article 32 in the Constitution of Romania. Kindergarten is optional under the age of six. At the age of six, children must join the "preparatory school year", which is mandatory in order to enter the first grade. Schooling starts at the age of seven, and is compulsory until the tenth grade (which corresponds with the age of sixteen or seventeen). The school educational cycle ends in the twelfth grade, when students graduate the baccalaureate. Higher education is aligned onto the European Higher Education Area.

Pre-higher education: Duration of compulsory education: Age of entry: 6-7 Age of exit: 16-17 Structure of school system: Primary

Type of school providing this education: Primary School Length of program in years: 4 Age level from: 6/7 to 10/11 Lower Secondary Type of school providing this education: Gymnasium + Lower cycle of high school or Gymnasium + "arts and trade schools" (vocational) - Grades 5 to 10 Length of program in years: 6 Age level from: 10/11 to 16/17 Certificate/diploma awarded: Capacity Certificate Upper Secondary Type of school providing this education: Upper cycle of high school, Grades 11-12 or 13 Length of program in years: 3 Age level from: 16/17 to 19/20 Certificate/diploma awarded: Baccalaureate Diploma Vocational Type of school providing this education: Professional School Length of program in years: 2 Age level from: 14/15 to 16/17 Certificate/diploma awarded: Graduation Certificate Vocational Type of school providing this education: Specialty High School Length of program in years: 4 Age level from: 14/15 to 18/19 Certificate/diploma awarded: Baccalaureate Diploma + Vocational Certificate Specialized Technical/ Vocational Type of school providing this education: Post-secondary School Length of program in years: 3 Age level from: 18/19 to 21/22 Certificate/diploma awarded: Graduation Diploma of Post-secondary School Secondary education consists in: 1) lower secondary school education organized in Gymnasium for grades 5 to 8 and Lower cycle of High School or Arts

and trades schools (vocational) for grades 9 and 10. 2) upper secondary school education organized in Upper cycle of High School for grades 11, 12 and 13 followed, if necessary, by an additional high school year for those who want to move from vocational training (grade 10) to upper secondary school education. High school education (lower cycle of high school and upper secondary school education) offers three different orientations (academic, technological, specialization). HIGHER EDUCATION: Higher education in Romania is offered in both public and private higher education institutions. These include universities, academies and colleges organized in specialized departments. In accordance with its objectives, university education comprises: short university education offered by university colleges (3 years), long university education (4 to 6 years) and postgraduate university education (1 to 2 years). Public higher education institutions are coordinated by the Ministry of Education and Research. University autonomy is fully guaranteed. Private higher education is an alternative to public education. It is subject to an accreditation process. Accredited private institutions may obtain state support.

University level studies: University level first stage: Graduation Diploma; Bachelor Degree Diploma The first stage of university-level study comprises short-term (3 years) or long-term diplomas (4 to 6 years, according to the field of study). University level second stage: Postgraduate Diploma; Master; Specialization The second stage is composed of diplomas awarded after one to two years of studies which may include research work. University level third stage: Doctoral studies The Doctorate in Romania is the highest postgraduate stage of professional specialization and lasts for 4 - 6 years. There is only one type of Doctorate. Doctoral studies can be carried out either in full-time courses (up to four years) or in extra-mural courses (up to six years). Extra-mural courses can also be offered in main foreign languages. Candidates who have passed the examination for the Doctor's Degree (Doctorate) are awarded the Doctor of Science Diploma (PhD).

## Practices and organisations

Practices and organisations (universities, institutions providing teacher training, teachers' unions) dealing with key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills, education policies and teacher training

Practices and organisations (universities, institutions providing teacher training, teachers' unions) dealing with key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills, education policies and teacher training Teacher education: Training of pre-primary and primary/ basic school teachers Pre-primary teachers and primary school teachers are trained in pedagogical high schools. Training of secondary school teachers Secondary-school teachers for lower secondary education need a degree from short term higher education and Secondary-school teachers for upper secondary a degree from long term higher education. All the above mentioned categories of teachers must have completed the pedagogical module (during university courses or at least 5 years after graduation) and the special training programmes corresponding to each qualification.

Training of higher education teachers Higher education teachers (tutors, assistant lecturers, associate lecturers, associate professors, professors and consultants) are appointed on a competitive basis from among graduates of higher education institutions who have demonstrated outstanding teaching and research qualities. Most candidates seeking positions as teachers in higher education are engaged in or have completed doctoral studies. Possession of a Doctor's Degree is compulsory for senior appointments such as lecturers and professors. Assistants should be Ph.D. candidates. Management and Other Education Staff The management positions in Pre-academic education are as follows: • Management positions in educational institutions: head and deputy head; The management positions head and deputy head can be occupied by permanent teachers with at least didactic grade II and 5 years seniority in education, distinguished for their professional, managerial and moral qualities. Appointment for the head and deputy head positions is based on open competitions organised by the County School Inspectorates (open recruitment procedure). Management positions in higher education are as follows: • Head of the chair; • Director of the department; • Faculty dean and pro-dean; director of the university college; • Rector and pro-rector of the higher education institution. According to the provisions of law, all management structures and management positions in higher education are elected through secret suffrage for a 4-year period. Candidates are expected to have distinguished professional, managerial and moral qualities and to hold high teaching positions in the academic hierarchy.

## CONTINUED PROFESSIONAL DEVELOPMENT

Financing vocational training In 1995, the budget for vocational education and training (provided within the frame of the formal education system) was 0.52% of GDP. The main source of financing is the central budget. Local public administrations also contribute to building, repairing and maintaining schools. Continuing training of the unemployed is financed by the Ministry of Labour and Social Protection out of the Employment Fund, made up largely of employers' contributions (5% of their overall gross payroll costs) and employees (1% of their gross salaries). About 20% of the fund is used for continuing training of the unemployed. Budget subsidies also contribute to cover funding gaps. Continuing vocational training (CVT) Training activities are planned on the basis of an annual national framework programme which brings programmes developed by each county. Continuing training courses are organised within County Training, Re-training and Further Training Centres, schools or other training units. The new government planned a rapid restructuring of the economy which is expected to increase unemployment. Therefore, it also plans to support training for the workers who will become redundant and promote the training of the employed in order to adapt their skills to the new requirements of the economy. The CVT system consists of: - Nationally regulated CVT system, with two branches: o formal CVT (sub)system, consisting of CVT providers; o non-formal and informal CVT (sub)system, consisting of competences assessment centres; - CVT regulated at sector level; - Non – regulated/ free CVT market.

The fact that the CVT regulation framework is not an integrated one leads to differences regarding the certification/ recognition of the learning outcomes and

generates obstacles related to learning/ career pathways. The nationally accredited training providers (formal CVT) and the nationally accredited competences assessment centres (non formal and informal CVT) deliver nationally recognised certificates (including Europass supplement). These certificates are recognized on the labour market and inside the CVT system (including between the formal subsystem and the non-formal/informal one) and lead to the accumulation of competences/qualifications. But, as affirmed before, these certificates are not recognized by the IVET system. There are specialized CVT providers set up for responding to a (sub)sector needs; usually these kind of providers are not nationally accredited, but their certificates are recognized by the (sub)sector (for example, National Banking Institute; National Institute for Public Administration, etc.) There is also a free/ non-regulated CVT market; some of the training providers offer courses/ certificates recognized at international/ European level (Microsoft, Cisco, EBC\*L, ECDL, etc.) The apprenticeship at the workplace is a VET system oriented towards young people (age 16-25) who want to achieve to a qualification (level 1, 2 or 3 from 5). The apprenticeship agreements, signed between young people and accredited/ authorised enterprises, are special work agreements. The duration is of maximum 3 years, and of minimum 6 months (for level 1), 12 months (for level 2), and 24 months (for level 3). The apprenticeship is a training programme alternating theory periods (within accredited/ authorised training providers) and practice on the job. The Romanian VET system is based on two types of standards - educational and training standards: - professional training standards (SPP) specific for both VET providers - iVET and CVET (partially), developed by the TVET National Centre and accessible on the [www.edu.ro](http://www.edu.ro). - occupational standards (SO), used only by the CVET system, developed by the National Qualifications Authority .These SO have been developed in two ways: till 2003 inside a World Bank financed program/ after 2004 based on the results the Phare 2004 , 2005 and 2005 programs. Due to the different program leaders, these two standards categories are not similar, from the structure and assessment criteria. The above mentioned official SOs are accessible on [www.cnfpa.ro](http://www.cnfpa.ro). Both standards - SPP and SO - categories are structured and based on competences - key competencies, general competencies, specific competencies, evaluation criteria. Opposite to these standards developed the Professional Training Programs finalized by examination sessions. For the higher education do not exist till now training standards, but for each qualification has been defined a minimal set of professional competencies and transversal competencies. All these qualifications are visible on the RNCIS – National Register of the higher education qualifications ([www.rncis.ro](http://www.rncis.ro)).

## 10.2 Policy environment

Romanian education and vocational training system in Romania adjusts by its various domains and levels, according to economic, social, political and cultural changes identified within the society. The 2013-2016 Governmental Program, the programmatic European documents in this area (Europe Strategy 2020, ET Framework 2020), the 2007 – 2013 National Development Plan and the 2011 – 2013 National Reform Program constitute the basis of the main strategic guidance of the Ministry of National Education. The Law of National Education 1/2011 provides the

general and unitary legal framework for reaching the national benchmarks in the area of education proposed by the Europe 2020 strategy and, consequently, for the implementation of the measures proposed by The National Reform Programme 2011-2013. The following general objectives for the areas of education and professional training and scientific research and technological development are concerned: I. Pre-academic education • Ensuring the legal access and increasing participation to education for every child in Romania • Quality assurance for all levels of education and professional training • Development of the vocational and technical education; correlating the education and the professional training system with the labour market • Ensuring and modernizing the material basis of the pre-university education; the use of new technologies • Appropriate funding assurance of the education and professional training system • Encouraging the lifelong learning II. Higher education • Ensuring the autonomy of the higher education and of the university research – Self-government, based on a legal framework as wide as possible • Increasing the competitiveness of the Romanian universities • Obtaining performance-based funding for the higher education institutions • Increasing the relevance of university level education for the labour market needs III. Developing the European and international dimension of the Romanian education

The main action directions undertaken resulting from the educational public policies: I. Pre-academic education • Continuing the social support programs • Ensuring the conditions for the participation to education for the particular high risk groups • Establishment of early education and supporting the preparatory class • Promote education in national minority languages • Upgrading curriculum - curriculum centered on the key competences • Achieving relevant evaluations and organizing the national exams and competitions under optimal conditions • Development of a competitive educational market for the continuous training programs for teachers • Ensuring the autonomy of decision at school level in partnership with all the stakeholders and assuming the public responsibility • Supporting the vocational education for class IX graduates • Promote entrepreneurship • Modernizing the teaching-learning-evaluation process by means of ITC • Encouraging the development of new skills/ qualifications; developing of new continuous training programs • Promoting the concept of educational services for the benefit of the community II. Higher education • Guaranteeing the university autonomy, associated with public liability • Development of real partnerships, networks of cooperation with economic agents, public and private institutions, NGOs, social partners • Creating an objective and fair environment between higher education institutions • Achieving adequate and predictable funding for higher education institutions based on performance criteria • Enhancing the quality assurance criteria • Focusing the resources by stimulating the university cooperation • Enhancing the system's monitoring, assessment and the strategic planning capacity • Compatibility of curriculum and graduates skills with the labor market needs • Strengthening the internationalization of efforts - valorisation of higher education • Development of the system of recognition and equivalence III. Developing the European and international dimension of the Romanian education • Strengthening the bilateral relations with the EU Member States, the ones from the European Economic Area and the third party states • Enhancing the cooperation within different international organizations and



institutions, in the area of education, professional training and research • Playing an active part within the regional initiatives of the European Union (e.g. the Strategy for the Danube Area) • Attracting as many foreign students as possible to study in Romanian higher education institutions • Supporting the Romanian communities from abroad by continuing the scholarship granting program and the teaching of the Romanian language, culture and civilization lecture in education units of the European Union Member States • Increasing Romania's role in providing assistance in the education area to other states, in order to achieve the objectives related to the Education for All initiative, supported by the UN and globally coordinated by UNESCO. Romania faces a major challenge in raising the quality of its education and training system. Early school leaving is a significant challenge. Romania should implement its reforms whilst building up its administrative capacity. Tertiary education should be aligned with the needs of the labour market and improve access for disadvantaged people.

### **Policies on key competencies in LLL**

Main features of the local, regional and national policy documents and strategies concerning education policies on key competencies in LLL

Key competences are essential in a knowledge society and guarantee more flexibility in the labour force, allowing it to adapt more quickly to constant changes in an increasingly interconnected world. They are also a major factor in innovation, productivity and competitiveness, and they contribute to the motivation and satisfaction of workers and the quality of work.

Key competences should be acquired by: • young people at the end of their compulsory education and training, equipping them for adult life, particularly for working life, whilst forming a basis for further learning; • adults throughout their lives, through a process of developing and updating skills. The acquisition of key competences fits in with the principles of equality and access for all. This reference framework also applies in particular to disadvantaged groups whose educational potential requires support. Examples of such groups include people with low basic skills, early school leavers, the long-term unemployed, people with disabilities, migrants, etc. Romania strategy concentrates on all of the eight key competences: • communication in the mother tongue, which is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; • communication in foreign languages, which involves, in addition to the main skill dimensions of communication in the mother tongue, mediation and intercultural understanding. The level of proficiency depends on several factors and the capacity for listening, speaking, reading and writing; • mathematical competence and basic competences in science and technology. Mathematical competence is the ability to develop and apply mathematical thinking in order to solve a range of problems in everyday situations, with the emphasis being placed on process, activity and knowledge. Basic competences in science and technology refer to the mastery, use

and application of knowledge and methodologies that explain the natural world. These involve an understanding of the changes caused by human activity and the responsibility of each individual as a citizen; • digital competence involves the confident and critical use of information society technology (IST) and thus basic skills in information and communication technology (ICT); • learning to learn is related to learning, the ability to pursue and organise one's own learning, either individually or in groups, in accordance with one's own needs, and awareness of methods and opportunities; • social and civic competences. Social competence refers to personal, interpersonal and intercultural competence and all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life. It is linked to personal and social well-being. An understanding of codes of conduct and customs in the different environments in which individuals operate is essential. Civic competence, and particularly knowledge of social and political concepts and structures (democracy, justice, equality, citizenship and civil rights), equips individuals to engage in active and democratic participation; • sense of initiative and entrepreneurship is the ability to turn ideas into action. It involves creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. The individual is aware of the context of his/her work and is able to seize opportunities that arise. It is the foundation for acquiring more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance; • cultural awareness and expression, which involves appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media (music, performing arts, literature and the visual arts).

### **Policies on ICT in the learning process**

Main features of the local, regional and national policy documents and strategies concerning education policies on ICT in the learning process

According to Eurydice's Key Data on Learning and Innovation through ICT at school in Europe, in Romania there are national strategies covering training measures in ICT in schools. There are central steering documents for all ICT learning objectives at secondary education level only, except for in developing programme skills. In secondary schools ICT is taught as a general tool for other subjects/or as a tool for specific tasks in other subjects, is included within technology as a subject, and as is taught as a separate subject, but is not included at primary school level. At primary and secondary education level recommendations or suggestions are provided in the ICT hardware areas of e-book readers, and computers projectors or beamers where support is also provided, and for ICT software where recommendation or suggestions and are made for multimedia applications, communication software, and for office applications and digital resources, where in addition support is provided.

Policies on creativity and innovation

Main features of the local, regional and national policy documents and strategies concerning education policies on creativity and innovation

Innovation is mentioned as one of the main focus areas of the Romanian government. However, there is no vision behind the innovation message. However, the stakeholders involved in education at all levels, organise specific events on the theme, like “Creativity and innovation in the education” Symposia, on subjects like: “Enhancing innovation and creativity, including entrepreneurship, at all levels of education and training”, “Creativity, innovation and technology transfer”, etc..

### **Policies on intercultural learning skills**

Main features of the local, regional and national policy documents and strategies concerning education policies on intercultural learning skills

Although Romania, as in fact the entire Balkan area, has always been an ethnic and cultural mosaic, concern for intercultural education is recent. In 2007, the intercultural education was introduced in secondary school curriculum, but only as an optional subject. The public policies in Romania regarding intercultural learning skills comprise the equal access to quality education and training, including education in minority languages, but the actions made by the authorities in this regard are quite scarce and timid.

### **Level and kind of investment**

What level and kind of investment is currently being deployed into key competencies in LLL, ICT in the learning process, creativity and innovation, intercultural learning skills?

In this moment, the Romanian government invests less than 5% GDP for education. In total, in 2011 and/or 2012, cuts in education budget were made in twenty countries for which data are available. Cuts of more than 5 % were observed in several countries, including Romania.

### **Strategic objectives**

Strategic objectives of Romanian government: - Basic digital skills training for Romanian citizens with emphasis on disadvantaged groups (people aged 3, persons with disabilities, etc.). - Supporting innovative methods of integrating Web 2.0 educational resources and open educational resources in the process of learning - Ensuring social equity policies - Enhancing innovation and creativity, including entrepreneurship, at all levels of education and training

## **10.3 Past and current initiatives and projects in Schools**

1. " ENSELQUAL - The teacher's role in the "triangle" of quality: student-teacher-school external quality assessment " Type of project: mobility project Objectives of

project: o development of specific external quality assessment activities skills provided by a school education o learning new methods and techniques to identify the direct relationship established between quality of teaching and the quality of the school of origin, useful for external evaluator activity o review of the work tools (reports and fact sheets) used in the external evaluation General assessment of this project: increased the expert body's ability of quality assessment provided by an educational institution with modern methods and practices, non-bureaucratic, with emphasis on the role of the teacher in providing quality

### **"Development of the national management and quality assurance in secondary education"**

- Type of project: OSP HRD strategic
- Objectives of project:

developing standards and methodologies for each level and form of education o professionalization of the personal involved in the management and quality assurance

- General assessment of this project

### **"QUALVET@RO - Capacity Building for the Romanian NRP: Promoting Quality"**

- Type of project:

The QUALVET@RO Romanian project is elaborating and piloting a communication strategy in order to implement at national level the EQAVET Recommendation, the policies and the instruments elaborated within the EQAVET Network. The European tools as EQF, ECVET and EQAVET seem to be not very well known. That is why the project team worked on ensuring a proper dissemination of information regarding these EU tools. At the same time closer cooperation structures among stakeholders – mainly with the social partners were set up. Thereby, a Communication Strategy and tools aiming to improve communication with all stakeholders and the dissemination of the European policies regarding quality in VET was developed and elaborated. As one of the remarks “at grassroots” level on the information provided at European level, was that information is often available in English, French or German, but not in the Romanian language. In order to promote the use of the EU tools and to bring these tools and policies closer to the potential users, they have to be in users’ own language, easy to read and they have to be easy to access. Therefore, a website, bringing together all the relevant information in the field of EQAVET is provided in the Romanian language. Another element of the communication strategy is the organization of regional workshops. This is an important element in creating commitment, as VET providers often have a regional scope. Therefore, expectations in the field of QA might differ from region to region. In the regional workshops, at least 200 representatives of Ministries, governmental agencies and other public bodies at national and regional levels were involved. The workshops were organized to start the discussion on Quality Assurance and the EQAVET framework in

particular, to raise awareness and to define the needs for implementation and further development from regional points of view.



## 11. Spain

### 11.1 National context

#### Population, Economic and social characteristics

In 2008 the population of Spain officially reached 46 million people, as recorded by the Padrón municipal. Spain's population density, at 91/km<sup>2</sup> (235/sq mi), is lower than that of most Western European countries and its distribution across the country is very unequal. With the exception of the region surrounding the capital, Madrid, the most populated areas lie around the coast. The population of Spain more than doubled since 1900, when it stood at 18.6 million, principally due to the spectacular demographic boom in the 1960s and early 1970s.

Native Spaniards make up 88% of the total population of Spain. After the birth rate plunged in the 1980s and Spain's population growth rate dropped, the population again trended upward, based initially on the return of many Spaniards who had emigrated to other European countries during the 1970s, and more recently, fuelled by large numbers of immigrants who make up 12% of the population. The immigrants originate mainly in Latin America (39%), North Africa (16%), Eastern Europe (15%), and Sub-Saharan Africa (4%). In 2005, Spain instituted a three-month amnesty program through which certain hitherto undocumented aliens were granted legal residency.

In 2008, Spain granted citizenship to 84,170 persons, mostly to people from Ecuador, Colombia and Morocco. A sizeable portion of foreign residents in Spain also comes from other Western and Central European countries. These are mostly British, French, German, Dutch, and Norwegian

Spain has the thirteenth largest economy by nominal GDP in the world, and fourteenth largest by purchasing power parity. The Spanish economy is the fifth-largest in the European Union, and the fourth-largest in the Eurozone, based on nominal GDP statistics. In 2012, Spain was the eighteenth-largest exporter in the world and the sixteenth-largest importer. Spain is regarded as the world's 23rd most developed country, among the countries of very high human development. Despite this, the Spanish economy's recent macroeconomic performance has been poor; Between 2008 and 2012 the economic boom of the 2000s was reversed, leaving over a quarter of Spain's workforce unemployed by 2012. In 2012, the Spanish economy contracted by 1.4%, and the Spanish economy is still mired by recession as of Q2 2013.

In spite of the recent economic performance of the Spanish economy, Spain actually has a trade surplus with other countries in the EU of € 2.19 billion in May 2013 and

has a narrowing trade deficit globally with exports rising 7.3% year-on-year in May of the same year.

Spain is a member of the European Union, the Organisation for Economic Co-operation and Development, and the World Trade Organisation.

## Description of the types of education and training

### *Spanish Education System*

The Spanish Education System provides the following teachings:

**Pre-Primary Education** is up to 6 years old. Although it is not a compulsory education stage, the second cycle is free in any publicly-funded school (public schools and publicly-funded private schools). Public schools providing it are called Pre-Primary Schools and those, also offering Primary Education are called Pre-Primary and Primary Schools.

**Basic Education** is compulsory and free in publicly-funded schools. It lasts ten years of schooling and it is divided into two stages:

- Primary Education, provided in Primary Education schools. It covers six academic years, usually studied between 6 and 12 years old.
- Lower Compulsory Secondary Education (ESO), studied in Secondary schools, between 12 and 16 years old. At the end of this stage, students receive the first official certificate, the Lower Compulsory Secondary Education Certificate, which allows them to access Upper Secondary Education or world of work.

**Upper Secondary Education** is also provided in Secondary schools. It lasts two academic years, usually studied between 16 and 18. It offers two possibilities: Baccalaureate (mainstream branch) and Intermediate Vocational Training (professional branch). This last one is also provided in Vocational Training integrated institutions and in National reference institutions.

**Higher Education** includes university and professional studies. University studies, provided in universities, lead to the obtaining of Bachelor, Master and Doctorate Degrees. Advanced Vocational Training is provided in the same schools than in those providing Intermediate Vocational Training.

**Adult Education and Training** covers different teachings provided by the Education and Labour Authorities, studied in studies from different nature. On-site teachings leading to the obtaining of official degrees of the Education System are provided in ordinary schools or specific schools for adults. Adult Education and Training is aimed at people over 18 and, as an exception, to workers over 16 who cannot attend school in ordinary regime, or at high performance athletes.

**Specialised Education** Apart from these studies, the Spanish Education System offers Specialised Education:

- Language Education, provided at Official Language Schools. Only students over 16 can take these studies.
- Artistic Education, including Elementary Music and Dance Education, Professional Artistic Education and Advanced Artistic Education. These studies are provided in different specific schools, according to every kind and level of education.
- Sports Education, organised in Intermediate and Advanced Vocational Training cycles and provided in the same institutions than those providing Vocational Training.

*Principles established for Non-University Education*

Non-University Education is regulated by the following the regulations:

- The 1985 Organic Act Regulating the Right to Education (LODE), whose main goals are:
  - Guarantee the right to Education and academic freedom to all residents in Spain.
  - Promote society participation in Education.
  - Rationalise the provision of publicly-funded school places.
  - Assure the right to access higher education stages according to talent and vocation, without discrimination on account of economic circumstances, social background or place of residence.
- The 2002 Organic Act on Qualifications and Vocational Training (LOCFP) aims at organising a comprehensive system of Vocational training, qualifications and accreditations satisfying the social and economic demands by means of different training modalities. Its main objectives are:
  - Guarantee the access to the different modalities of Vocational Training for all the citizens under conditions of equality.
  - Encourage the participation and cooperation in the policies for Vocational Training and qualification of the social stakeholders and the different Public Authorities.
  - Adapt training and qualifications to the criteria of the EU attending to the objectives of single market and free movement of workers.
  - Promote public and private investment in the qualification of workers.
  - Provide quality training.

- Officially evaluate and accredit vocational qualifications, regardless the way they were acquired.

- The 2006 Organic Act on Education (LOE) is the basic regulation currently regulating the Spanish Education System. It establishes the following principles, objectives and purposes:

- Equity, which guarantees equal opportunities and education inclusion.

- The quality of Education for all students, regardless their conditions and circumstances.

- The participation of the education community in the organisation, governance and running of educational institutions.

- Autonomy to establish and adapt the organisational and curricular actions within the framework of the powers and responsibilities corresponding to the State, the Autonomous Communities, the local corporations and the educational institutions.

- The cooperation between the State and the Autonomous Communities in the definition, application and evaluation of the education policies, as well as the Education Authorities with the local corporations in the planning and implementation of the education policy.

- The evaluation of the whole Education System, both in the planning, the organisation, the teaching and learning processes and the results.

- The teaching function as a key factor of the education quality, by socially acknowledging teachers and supporting them in their duty.

- Promotion and enhancement of education research, experimentation and innovation.

- Flexibility for adapting education to the diversity of students' aptitudes, interests, expectations and needs.

### *Decentralisation and Competencies in the Spanish Education System*

Regarding the administration and management of the Spanish Education System, it is necessary to highlight the meaningful decentralisation, that shares the competences between the State General Authority (Ministry of Education, Culture and Sport) and the Autonomous Communities (Regional Ministries or Departments of Education). The State Education Authority executes the general guidelines of the Government on education policy and regulates the basic elements or aspects of the system. The Autonomous Education Authorities develop the State regulations and have executive and administrative competences for managing the Education System in their own territory. In addition, the schools have pedagogical, organisational and

managerial autonomy for their resources. This autonomy is accompanied by the participation of the education community in the schools organisation, government, running and evaluation

Functions of the decision-making bodies in terms of Education in Spain

Ministry of Education, Culture and Sport (MECD):

- To enact the basic rules defining the constitutional right to Education, by establishing the general organisation of the Education System.
- To set the minimum requirements of the schools.
- To establish the general programme of Education, to set the core curricula and to control the academic and professional certificates valid throughout the national territory.

Regional Ministries or Departments of Education of the Autonomous Communities:

- To assume the regulations developed by the State rules and for the non-basic elements or aspects of the Education Systems.
- To assume the executive and administrative competences for managing the Education System in its own territory.

Regional Ministries of Education and municipalities:

- The State General Authority and the Autonomous Communities delegate the exercise of their functions to the municipalities in aspects having a direct impact on them.

Educational Institutions: - They have autonomy for preparing, enacting and executing a school development plan and a management plan, as well as the rules for organising and running the school, within the framework established by the State and Regional regulation. Source: Prepared by Eurydice Spain-REDIE from the regulations in force

### *Educational institutions*

Non-university educational institutions are classified according to their ownership and their funding source. Kinds of educational institutions depending on their ownership and their funding source:

- Public schools: They are owned by the Education Authority and publicly-funded.
- Private schools: They are privately owned and privately-funded.
- Publicly-funded private schools: Ownership is private but they can be publicly funded through a regime of agreements.



## Practices and organisations

### *Teacher Training*

Teachers and Education Staff can be divided into two groups, university and non-university, depending on the field where they teach.

The 2006 Organic Act on Education (LOE) establishes the requirements for accessing the teaching public service, the initial and continuing training, and the conditions for recognition, support and value of those teachers teaching Non-University Education.

Initial teacher training is undergoing profound changes resulting from the gradual adaptation of the university system to the European Higher Education Area (EHEA). At this moment, the study programmes previous to the EHEA, to be extinguished, coexist with the new degrees, to be implemented.

Initial training required for teaching is similar throughout Spain, but it is different depending on the education level. On this manner, it is possible to make the difference between Pre-Primary Education, Primary Education, Lower Compulsory Secondary Education (ESO), Bachillerado and Vocational Training

Some new regulations on initial teacher training were enacted in 2011. They cover the new specialties of the school teachers body, the new requirements for teachers of ESO and Bachillerado, Vocational Training and Language education, as well as pedagogic and didactic training equivalent to the university Master on Teacher Training for ESO and Bachillerado, Vocational Training and Language Education.

Work conditions for teachers vary depending on the ownership of the workplace, the employment status (civil servants, temporary civil servants or working staff) and the educational level they teach. As for public educational institutions, there can be differences between the various Autonomous Communities. The LOE and the regulations developing it establish the entrance system, mobility between the teaching bodies, reorganisation of teaching bodies and scales and their features, as well as the provision of places through State transfer competitions. The Autonomous Communities organise the teaching public civil service within the framework of their competences, respecting the rules that assure a common framework. In addition, for the teachers of Non University Education, the 1985 Organic Act Regulating the Right to Education (LODE) developing the rights that the Constitution recognises to teachers: academic freedom, right to unionisation, right to participate in the control and management of publicly-funded schools, and right to assembly.

### *Continuing Professional Development*

Continuing professional development is both a right and a duty of all teachers. They can voluntarily enrol in training activities which involve the regular updating of their scientific, educational and professional expertise.

The Education Authorities are responsible for planning, organising and recognising continuing professional development within their jurisdiction providing teachers with a wide range of activities

The 2006 Organic Act on Education (LOE) lays down several guidelines for the in-service training programmes offered by the Education Authorities of the Autonomous Communities. These guidelines are: to adapt knowledge and teaching methods to trends in science and specific teaching methodologies; to offer training related to coordination, guidance, tutorship, attention to diversity and school organisation; to establish training programmes in Information and Communication Technologies (ICT) and foreign languages; to promote educational research and innovation programmes; and to provide specific training as regards equal opportunities between men and women, and coeducation.

The Spanish Ministry of Education, Culture and Sport (MECD) through the Spanish Institute for Education Technologies and Teachers Training (INTEF) annually determines the priority guidelines of in-service teachers training programmes. It also offers in-service training programmes at State level and establishes the relevant agreements with other institutions to this end. In their turn, the Autonomous Communities are also free to establish their own priority guidelines, taking into account the training needs of the teaching staff within their jurisdiction. This implies that both the content of the training and the institutions in charge of its provision differ from one Autonomous Community to another.

All Autonomous Communities have a network of institutions which provide teacher training activities. Although they have different names, the most widespread is Teachers and Resource Centres. Their tasks and powers are related to the organisation and development of the training plan within their area of action, the promotion of interinstitutional working teams supporting the dissemination of knowledge, the provision of resources to the teaching staff to contribute to the development of their teaching activity and the improvement of educational innovation. These institutions are responsible for a variable number of primary and secondary educational establishments to which they provide support in relation to professional development and resources or guidance to carry out innovation or improvement initiatives.

In all the Autonomous Communities there are also other institutions involved in the continuing professional development of teachers, such as university departments, institutes of education, professional associations, unions or educational reform movements.

Continuing professional development can be implemented through in-person or on-line courses, seminars and working groups or training projects in educational institutions. Teachers can take part in these activities out of their teaching hours, during the hours spent in the school or during working hours if they are carried out outside the educational institution. To take part in some of these activities, teachers

may have to comply with several admission requirements usually related to their university qualifications or teaching experience in certain educational levels.

### *Innovation Consulting*

National Institute for Education Technologies and Teachers Training INTEF (Instituto Nacional de tecnologías educativas y Formación del profesorado)

<http://www.ite.educacion.es/es/intef>

The Spanish Institute for Education Technologies and Teachers Training annually determines the priority guidelines of in-service teachers training programmes. It also offers in-service training programmes at State level and establishes the relevant agreements with other institutions to this end

National Center for Educational Research and Innovation CNIIE (Centro nacional de Innovación e Investigación educativa)

<http://www.mecd.gob.es/cniie>

The National Center for Educational Research and Innovation is considered a generating unit of knowledge and innovation in education, in the service of the Spanish educational system. Its specific mission is to contribute to the promotion of quality education through the acquisition of basic skills, with particular attention to non-curricular areas.

National Institute for Education Technologies and Teachers Training INEE (Instituto Nacional de Evaluación Educativa)

<http://www.mecd.gob.es/inee/portada.html>

The Spanish Institute for Education Technologies and Teachers Training annually determines the priority guidelines of in-service teachers training programmes. It also offers in-service training programmes at State level and establishes the relevant agreements with other institutions to this end.

European Qualifications Framework MECU (Marco Europeo de Cualificaciones profesionales)

<http://www.mecd.gob.es/mecu/en/>

The EQF is a common European reference framework which makes it possible for European countries to compare their qualifications. MECU, the Spanish Qualifications Framework for lifelong learning, is an instrument to promote and improve all citizens access to lifelong learning and their participation in it, as well as the recognition and use of qualifications at national and European levels.

## 11.2 Policy environment

National policies for the modernisation and flexibilisation of the spanish education system:

Spain has established the following priorities related to the modernisation and flexibilisation of the Education System, in line with the Strategic Framework for European Cooperation in Education and Training (ET2020) and the Strategy 'Europe 2020' for smart, inclusive and sustainable growth:

- Reduce early school drop-out with the goal of increasing the number of young people who have successfully finished Lower Compulsory Secondary Education (ESO), continue and end their studies in Bachillerato or in the Intermediate Vocational Training cycles.
- Make more flexible the access to Vocational Training (FP), Bachillerato and initial Vocational Qualification Programmes.
- Recognise the professional competencies acquired though work experience or non-formal training ways, which will make easier to continue post-compulsory studies.
- Improve young people's employability through the modification of FP and the inclusion of Dual Vocational Training, combining training and employment.
- Increase the proportion of population between 30 and 34 years old having finished Higher Education.
- Enhance the participation in continuing learning.

The Spanish Education System accepts the need for combining quality and equity in the training provision, understood as two inseparable principles, and not as conflicting objectives. In this sense, the features that best define it within the European overview are:

- The promotion of the evaluation and the innovation: the Education Authorities are committed to know the status of the Education System in order to enhance the necessary innovation and improvement processes, the reflection on the practice and the self-evaluation.
- The guarantee that any student will be excluded and their continuity in post-compulsory studies: the principle of equity assures equal opportunities, education inclusion and non-discrimination, and it acts as an element for compensating social and economic inequalities. In basic education, the attention to students diversity is established as a key principle in every education intervention, trying to prevent and satisfy the temporary or permanent needs of each of them. In all the education stages, compensating the inequalities between people, groups or territorial scopes in disadvantaged situation implies the provision of the economic resources and the

necessary support so that all the population will have the chance to receive quality education services.

The flexibility that makes easier the mobility between the different training options, within the framework of lifelong training and learning: the passage from training to employment and vice versa allows young people having dropped out to continue and complete their studies, and adults to continue their lifelong learning. For this purpose, some links between the different kind of teachings are established, making easier the passage from ones to another ones and allowing the making up of training ways adapted to personal needs and interests.

### **Policies on key competencies in LLL**

Current regulations result in considering the term " basic skills" in the Spanish curriculum, not only as a mere definition of a concept, but a complete reformulation of the teaching methods . From "know" to "know-how", from "learn" to "learning to learn". The aim is that upon completion of compulsory schooling , young people have achieved a range of skills that enable them to enter the world adult and the labor market in a satisfactory manner.

Therefore, the education authority fosters a line of an innovative work led to the study, development and dissemination of strategies for teaching and learning basic skills that includes not only the formal aspects of education but also non- formal and informal . This line is to light and make visible the practices and models of teaching and learning to ensure that students reach not only in our educational system but outside of school too, the level of competence required to practice good citizenship in the 21th century .

### **Policies on ICT in the learning process**

Main features of the local, regional and national policy documents and strategies concerning education policies on ICT in the learning process The spanish government focuses on ICT in the learning process.

The Bill on the Improvement of the Quality of Education, which will modify the 2006 Education Act, establishes that information and communication technologies (ICT) are one of the areas playing a major role in the transformation of the education system. In this regard, the Act states that there is a need to review the concept of classroom and learning environment from a broad perspective of the educational function of the new technologies. The gradual introduction of ICT in the education system will make personalised education and its adaptation to each student's needs and pace possible. On one hand, it will serve as reinforcement and support in instances of poor performance and, on the other, it will help extend the knowledge acquired in the classroom without limitations.

ICT will also have to be a key tool in teacher training and lifelong learning, allowing citizens to combine training with their personal and work obligations, as well as in the management of processes

According to educational stages, in the first cycle of compulsory secondary education, ICT will be included in all the subjects of the three years, without prejudice to a specific treatment in any of the subjects. In the 4th year, ICT is one of the specific subjects from which students take a minimum of one and a maximum of three. In the two years of Bachillerato it is again one of the specific subjects from which students have to take a minimum of two and a maximum of three. At this stage, a new order is established, changing its name to 'Information and Communication Technologies I and I' and 'Information and Communication Technologies II'

### **Policies on creativity and innovation**

Innovation is mentioned by the Spanish and regional government as one of the drivers that lead to educational improvement, therefore in all administrations with responsibility for education there is a General Directorate for Innovation.

In our region, in particular, there are many initiatives that are launched with the ultimate goal of educational improvement combining it with creativity, which is the genesis of innovation. In this sense, in our region, the most important initiative that brings innovation and creativity is to combat school failure through music because of the musical tradition heritage.

### **Policies on intercultural learning skills**

Spain is undergoing a process of structural reforms in the field of education which, after a process of public information and debate with the education authorities, will be completed with the passing of the Act on the Improvement of the Quality of Education. In addition, the reforms of vocational training for employment and vocational training of the education system are continued and extended and the foundations for dual vocational training are laid.

Together with these reforms, the Ministry of Education, Culture and Sport and regional education authorities collaborate, through Territorial Cooperation Programmes, in areas which are considered strategic for the education system:

2013 Programmes / Objectives - PROA Plan-Reinforcement, Guidance and Support Programme: School support and reinforcement in primary and secondary education. - Plan to Reduce Early Drop-Out in Education and Training: Retention of students in the education system and programmes for the reintegration of those who dropped out with no qualification or certificate. - Plan to Improve Foreign Language Learning: Stays abroad for teachers and students, support in the first years of primary education and an increase in the number of language assistants.



## Level and kind of investment

In Spain there is a generic public investment in R + D + I (Research + Development + Innovation) although it is becoming less due to the economic crisis, it is expected is to increase.

According to the 2013 National Programme of Reforms, investment on R&D&i must be one of the priorities of public spending policies. Although there has not been any cut in the expenditure on civil R&D&i in the State Budget for 2013 compared with the previous year, the macroeconomic context of the country and the need to meet the deficit targets set have prompted to review the initial objective of 3% of the GDP on R&D, envisaging an investment of 2% for 2020. In order to achieve this objective, a marked increase in the degree of involvement and participation of the private sector in R&D&i investment, which must reach 1.20% by 2020, is expected.

There isn't, however, a specific budget dedicated to educational innovation. Common practice relies on public calls for aid to educational innovation.

Examples of this indirect investment in Valencia are: - Call for program contracts

- Grants to educational innovation
- Helps to reduce school failure through music
- Support for projects to improve the educational quality Network

Examples at the national level are:

- Grants to educational innovation: Deepening key skills
- Grants to educational innovation: Improving the quality of education

In the Valencian Community the following aids have been granted in recent years,

2013

Aid for innovation projects and combating school failure through music: 600,000 €  
Schools benefited: to be determined

Aid to developing innovation projects by schools: 230,000 €: Schools benefited: 216

2012 Aid for innovation projects and combating school failure through music: 200,000 €  
Schools benefited: 331

Aid Projects for improvement in centers of the Education Quality Network: 206,900 €  
Schools benefited: 158

2011

Aid for innovation projects by schools: 210,000 €: Schools benefited: 106

Aid Projects for improvement centers Education Quality Network: 206,900 € Schools benefited: 207

### 11.3 Past and current initiatives and projects in Schools

Some initiatives and driven projects in recent years in schools are:

#### "SCHOOL 2.0"

School 2.0 program (Programa Escuela 2.0)

<http://www.ite.educacion.es/es/escuela-20>

National initiative / ICT

School Program 2.0 is the latest project of integration of Information Technology and Communication (ICT ) in schools . The objective was to launch the XXI century digital classroom, equipping with technology infrastructure, ensuring Internet connectivity and interconnectivity within the classrooms, and also promoting teacher training and creating digital access to educational materials. The proceedings began in 2009-10 and focused , in its first phase, on 5th graders of primary schools supported by public funds. Throughout the two years of implementation about 650,000 students in the third cycle of primary education and the first cycle of ESO have a laptop as a learning tool. In all, 30.000 digital classrooms have been created, 160.000 teachers have participated in training related to ICT and it has provided a significant impetus to the production and use of digital educational contents both by education and by the publishing industry.

#### "TABLETS"

Tablets pilot program (Programa experimental Tablets)

[http://www.cece.gva.es/eva/es/programas\\_exp.htm](http://www.cece.gva.es/eva/es/programas_exp.htm)

Regional initiative / ICT

The overall objective of the program is to promote the use of digital textbooks using tablets as hardware. This way students will experience a dynamic teaching which incorporates the electronic tablet as alternative to purchasing textbooks on paper.

The program is not mandatory, this course it has been implemented in 25 schools supported by public funds of Valencia. It has been implemented for students from 5th

grade of primary. The forecast for next year is to be permanently implanted with a possible participation of 100 schools.

## "EDA"

Project EDA. Didactic piloting in classroom with ICT (Experimentación didáctica en el aula)

<http://recursostic.educacion.es/eda/web/>

National initiative / ICT

EDA is a project that aims to help teachers to incorporate ICT into their classroom activity, identify advantages and disadvantages of using these new technologies and new approaches to teaching. Although initially only for math began in 2005, has been extended in recent years to other subjects and other cross curricular projects. Within this initiative same specific projects have been developed such as: Biosphere Project, Descartes Gauss Project; Malted Project; Project Newton; Simulators FP and ICT 2.0 There is also the participation in the pilot project for ACER - EUN netbook for classroom usage (40 classrooms in 14 Spanish centers with five other European countries) and then with ACER - EUN pilot project for the use of tablets in the classroom (3 classrooms in Spanish centers, along with eight other European countries) Many schools are involved and implementing this project applications.

## "AGREGA, WikiDidáctica"

Repositories of digital educational content (Repositorios de contenidos educativos digitales)

Agrega

<http://agrega.educacion.es/>

<http://www.agrega2.es/web/>

WikiDidáctica

<http://recursostic.educacion.es/multidisciplinar/wikididactica/index.php>

National initiative / ICT

The implementation of ICT in education involves the use of digital educational materials. One of the goals is to be able to share these resources among all teachers. Hence the creation of the two educational digital content repositories. They are intended to leverage the collective knowledge of teachers to build a useful space that facilitates the gradual incorporation of digital resources in the various subjects and stages of education. In recent years the number of accesses to the repositories has

grown exponentially since the teaching community has seen in them a bank of very good resources.

"PASE"

PASE Program. Host Program Educational System (Programa de Acogida al Sistema Educativo)

[http://www.cece.gva.es/eva/es/exp\\_pase.htm](http://www.cece.gva.es/eva/es/exp_pase.htm)

National-Regional initiative / Intercultural Learning Skills

The PASE program proposes a framework for the development of host performances and integration of immigrants and educational support. It is a measure of temporary support (maximum one year) addressed to newcomers foreign students. In its first phase, it provides support to students who know the language of instruction, the second phase offers support to students who have deficiencies in the areas or subjects, mainly in the instrumental to facilitate its rapid school integration. The methodology of the program integrates language learning with content and subject areas. It has been developed since 2005-06 for a total of 447 secondary schools with 860 teachers and 5,206 students involved and welcomed to 147 primary schools, 150 teachers and 1,496 students.

"LEERES"

Leeres Project (Proyecto Leeres)

<http://www.mecd.gob.es/cniie/proyectos/Leeres.html>

National initiative / Creativity and Innovation

Leeres is a program that serves multiple literacy purposes which is considered as the essential tool for transforming information into learning. Its web site (<http://leer.es/>) offers resources on reading for all areas and all levels of education. It focuses on teacher training through its webcast ( <http://videos.leer.es/> ), resources based on videos that demonstrate good reading practices and besides it has launched various courses on reading abilities.

It also provides information, resources and initiatives related to school libraries.

It creates collaborative networks, giving visibility to the reading-related activities carried out in the ministry, in the regions and in the Latin American community.

At present this project and its implementation in the regions, is booming.

In the Valencian region it is compulsory from the academic year 2012-2013 to all schools where each year schools draw up and implement a "Plan for the promotion of reading "

### **"COMBAS / PIC"**

2010-2011-2012 COMBAS Program for the Curricular Integration of Key Competences Programa de Integración Curricular de las Competencias Básicas )

2012-2013 PIC Program for the Curricular Integration of Key Competences Programa de Integración Curricular )

<http://www.mecd.gob.es/cniie/proyectos/competencias-basicas/Integracion-curricular/proyecto-combas.html>

National-Regional Initiative / Key competences

This program is implemented in the 2010-11 academic year and provides:

- Theoretical and practical advice focused on solving educational tasks related to the inclusion of basic skills in curriculum development.
- Teacher training through a cascade process between state-level advisory, monitoring and site adaptation at regional and local level as well as coordination with teachers involvement in horizontal resolution and delivery of the proposed tasks.
- A documentary based on literature reviews and expert teams.
- A digital portal for the exchange of documents, materials, proposals and tasks to give visibility to best practices and initiatives of interest

In the 2010-11 academic year it gathered 150 primary and secondary schools In the year 2011-12 it involved 81 primary and secondary schools In this course 2012-2013 primary and secondary schools participants rose to 100

### **"ALZIRA"**

The Challenge of Student Participation and Motivation: lesson plans integrating key competences. (La participación y motivación del alumnado como reto: programaciones didácticas de aula integrando las competencias básicas)

<http://www.proyectoatlantida.net/> Atlantida Innovation Group materials related to the Alzira experience: curriculum specification, integrated teaching units and the new teaching plan for the entire community. Regional Initiative Teacher Training Centre, Alzira, Valencia. Centro Profesorado Alzira, Valencia.

Start: September 2009; End: September 2012 22 centres within the area of influence of the CEFIRE and 8 centres from bordering areas. 500 teachers in total. 1 coordinator for the initiative in each school. Primary and secondary education teachers. Three learning contexts were used:

- In the CEFIRE: a network of coordinators for the initiative in each school and management teams in schools.
- In each school: top-down educational training and reflection (by the coordinator for the initiative to the departments for teaching coordination, the teachers of the various cycles and the educational coordination committee (ECC) of each school).
- In each classroom: the students.



## 12. UK

### 12.1 National context

#### Population, economic and social characteristics

Education in the United Kingdom is a devolved matter, with each country having a separate education system.

Whilst education in England is the responsibility of the Secretary of State for Education, the day-to-day administration and funding of state schools is the responsibility of local authorities. Universally free of charge state education was introduced piecemeal between 1870 and 1944. Education is now mandatory from ages five to sixteen (15 if born in late July or August). In 2011, the Trends in International Mathematics and Science Study (TIMSS) rated 13–14 year old pupils in England and Wales 10th in the world for maths and 9th for science. The majority of children are educated in state-sector schools, a small proportion of which select on the grounds of academic ability. Two of the top ten performing schools in terms of GCSE results in 2006 were state-run grammar schools. Over half of students at the leading universities of Cambridge and Oxford had attended state schools. Despite a fall in actual numbers the proportion of children in England attending private schools has risen to over 7%. In 2010, more than 45% of places at the University of Oxford and 40% at the University of Cambridge were taken by students from private schools, even though they educate just 7% of the population. The universities of England are among some of the top universities in the world; the University of Cambridge, the University of Oxford, the University College London and Imperial College London are all ranked in the global top 10 in the 2010 QS World University Rankings, with Cambridge ranked first.

Education in Scotland is the responsibility of the Cabinet Secretary for Education and Lifelong Learning, with day-to-day administration and funding of state schools the responsibility of Local Authorities. Two non-departmental public bodies have key roles in Scottish education. The Scottish Qualifications Authority is responsible for the development, accreditation, assessment and certification of qualifications other than degrees which are delivered at secondary schools, post-secondary colleges of further education and other centres. The Learning and Teaching Scotland provides advice, resources and staff development to education professionals. Scotland first legislated for compulsory education in 1496. The proportion of children in Scotland attending private schools is just over 4%, and it has been rising slowly in recent years. Scottish students who attend Scottish universities pay neither tuition fees nor graduate endowment charges, as fees were abolished in 2001 and the graduate endowment scheme was abolished in 2008. The universities of Scotland are among some of the top universities in the world; the University of Edinburgh, the University of Glasgow and the University of St Andrews are all ranked in the global top 100 in the 2012 QS World University Rankings, with Edinburgh ranked 21st.

The Welsh Government has responsibility for education in Wales. A significant number of Welsh students are taught either wholly or largely in the Welsh language; lessons in Welsh are compulsory for all until the age of 16. There are plans to increase the provision of Welsh-medium schools as part of the policy of creating a fully bilingual Wales.

Education in Northern Ireland is the responsibility of the Minister of Education and the Minister for Employment and Learning, although responsibility at a local level is administered by five education and library boards covering different geographical areas. The Council for the Curriculum, Examinations & Assessment (CCEA) is the body responsible for advising the government on what should be taught in Northern Ireland's schools, monitoring standards and awarding qualifications.

### **Description of the types of education and training (formal and informal) that occur in a country**

Education is compulsory between the ages of 5 and 16 years. The great majority of young people continue with full-time education after the age of 16. The Government is committed to raising the participation age in England to 17 in 2013 and 18 in 2015, so that all 16 and 17 year-olds participate in education or training. Many post-compulsory secondary programmes are of two years' duration, i.e. for 16- to 18-year-olds however the funding framework applies to 16- to 19-year-olds and for this reason the age bracket 16–18/19 is adopted throughout this description.

Publicly-funded schools comprise maintained schools, funded through the local authority, and academies, which are legally independent schools but are funded directly from central government. All publicly-funded schools enjoy a high level of autonomy and are responsible for their own budgets and staffing decisions. All education institutions have a governing body, responsible for the general direction of the institution, which includes representatives from a range of stakeholders. Strategic and financial planning at school level is shared between the school governing body and headteacher, whilst the day to day management of schools is the responsibility of the headteacher. Decentralisation and autonomy in the education system is balanced by a high degree of accountability, including the publication of performance and inspection data. Schools are responsible for planning the whole curriculum experienced by pupils, taking into account the school's particular needs and circumstances. This must be a balanced and broadly based curriculum which promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, and prepares pupils at the school for the opportunities, responsibilities and experiences of later life. Maintained schools must by law include the National Curriculum and religious education in the whole curriculum. Although academies are not required by law to follow the National Curriculum, under the terms of their funding agreements they must teach English, mathematics and science and religious education. Teaching hours for particular subjects are not centrally prescribed. Grade repetition is not a feature of the school system. 14–16 secondary education leads to combinations of single subject qualifications, provided by external

awarding organisations within a qualifications system common to England, Wales and Northern Ireland.

16–19 secondary education is characterised by subject specialisation and a range of providers: sixth forms in secondary schools (11 to 18/19), sixth-form colleges (16 to 19) or further education colleges (16+). The landscape of providers varies according to local arrangements but all areas provide young people with a wide choice of programmes leading to general/academic, pre-vocational or vocational qualifications. Qualifications are provided by centrally regulated awarding organisations, external to the school or college within a qualifications system common to England, Wales and Northern Ireland. Higher education institutions (HEIs) are diverse, ranging widely in size, mission and history. HEIs are private bodies which are independent of government. They receive their income from a number of sources, including from student fees, through research projects and by generating business. However, they also receive a portion of their income from public funds. The structure of programmes is not regulated by law. Institutions are free to design their own programmes and awards and to determine the conditions on which they awarded, subject to the status of their degree-awarding powers. However, all institutions structure their programmes along broadly similar lines within a three cycle framework, which conforms to the European Higher Education Area (EHEA) qualifications framework.

## Pre-school Education

Introduced in 2008, the Early Years Foundation Stage (EYFS) covers children from birth to age five in what may be known as ‘early years’, ‘nursery’, ‘pre-school’ or ‘pre-primary’ education. Maintained provision for children aged three and over usually takes the form of nursery schools, or nursery classes and reception classes (for four- to five-year-olds) within primary schools. Nursery school places are also provided in children’s centres, which offer integrated early years education, childcare and related family support and health services. The EYFS replaced the foundation stage for three- to five-year-olds, introduced by the Education Act 2002, as a statutory part of the National Curriculum, and also includes the previous ‘Birth to Three Matters’ framework. Provision for children aged three to five years within in EYFS is counted as ISCED 0. Following an extensive review of early years provision (Tickell, 2011), a revised and slimmed down Statutory Framework for the Early Years Foundation Stage (DfE, 2012) came into force on 1 September 2012, replacing the original 2008 framework.

## Compulsory Education and Participation

Education is compulsory from age 5 to age 16, however the participation age is rising to 18. The Education and Skills Act 2008 introduced the requirement for all young people to participate in education or training until they are 18. The participation age is being raised in stages: to 17 from 2013 and to 18 from 2015. The first cohort to be affected began secondary education (Year 7, age 11) in September 2008 and is currently in Year 11 in the 2012/13 school year. This cohort must continue education or training until at least the end of the school year in which they turn 17. All

subsequent cohorts will have to continue until at least their 18th birthday. This does not mean that young people have to stay in school but they must pursue one of the following post-16:

- full-time education, such as school, college or home education
- an apprenticeship
- part-time education or training if they are employed, self-employed or volunteering full-time (which is defined as 20 hours or more a week).

In accordance with the Education Act 2002 and earlier legislation, the period of compulsory education is divided into four key stages:

- key stage 1 for pupils aged 5 to 7 (ISCED 1)
- key stage 2 for pupils aged 7 to 11 (ISCED 1)
- key stage 3 for pupils aged 11 to 14 (ISCED 2)
- key stage 4 for pupils aged 14 to 16 (ISCED 3).

Pupils transfer from primary to secondary school at age 11. The vast majority of secondary schools in England accept pupils from the full ability range. These are known as comprehensive schools. Some secondary schools cater for pupils up to the age of 16 only, others for pupils up to the age of 18/19. In some areas of England, pupils transfer at age 8 or 9 from a first school to a middle school, and subsequently to a secondary school (often known as a high school or upper school) at age 12 or 13. All such schools are legally categorised as either a primary or a secondary school, and all follow the same National Curriculum key stages as other schools.

## Post-16 Participation

At age 16, the majority of pupils continue their studies, either at school, in a sixth-form college, or at a further education institution – and from 2013, all young people must continue to participate in education and training until age 17, rising to 18 in 2015 (see the subheading ‘Compulsory Education and Participation’ above). It is currently more common for pupils wishing to undertake vocational education to transfer to a further education institution, although most schools offer a limited range of vocational courses. Most further education institutions offer both vocational and general academic courses.

## Practices and organisations

Central government has overall responsibility for the education system in England but responsibility for the provision of education is decentralised, lying with local authorities, voluntary providers including churches, the governing bodies of educational institutions and the teaching profession. Overall responsibility for the education service lies with the Department for Education (DfE) and with the Department for Business, Innovation and Skills (BIS). DfE responsibilities include planning and monitoring the education service in schools and early years settings, ensuring the provision of integrated services for children, and bringing together policy

relating to children and young people. BIS is responsible for science and innovation, skills, further and higher education and enterprise. The Education Funding Agency (EFA) is involved in the funding of education and training in schools and colleges up to age 19. It directly funds academies (public-sector independent schools) and passes funding to local authorities for maintained schools. The Skills Funding Agency (SFA) is responsible for funding and commissioning post-19 education and training. The Higher Education Funding Council for England (HEFCE) is responsible for funding in higher education. The direct costs of specific research projects are funded by the UK Research Councils which have a remit across the UK. Ofsted, the Office for Standards in Education, Children's Services and Skills, is responsible for the inspection and regulation of day care and children's social care, and the inspection of children's services, schools, colleges, initial teacher training, youth work, work-based learning and adult education. At higher education level, the Quality Assurance Agency for Higher Education (QAA) provides quality assurance services across the UK. It is independent of UK governments and is owned by the organisations that represent the heads of UK higher education institutions. Local authorities have a duty to secure sufficient suitable education and training opportunities to meet the reasonable needs of all young people in their area. The three core responsibilities of the local authority in education are to ensure a sufficient supply of school places; to tackle underperformance in schools and ensuring high standards; and to support vulnerable children and young people.

## **Policy environment**

### **Key Stakeholders involved in Lifelong Learning**

A range of government and non-government organisations are involved in the coordination of lifelong learning. These include:

- The Department for Education (DfE) and the Department for Business, Innovation and Skills (BIS).
- The Parliamentary Under Secretary of State for Skills (shared between DfE and BIS) whose portfolio includes further education, apprenticeships, adult skills, lifelong learning and informal adult learning.
- The Skills Funding Agency (SFA), a partner organisation of BIS, which funds and promotes adult further education and skills training.
- Ofsted, the Office for Standards in Education, Children's Services and Skills, which inspects and regulates education and skills provision for learners of all ages.
- The National Institute of Adult Continuing Education (NIACE) which aims to encourage all adults to engage in learning of all kinds.
- The National Careers Service which provides information, advice and guidance on learning, training and work opportunities as well as access to 'Lifelong Learning Accounts' – online accounts where individuals can store information relating to their career development.



Although the United Kingdom has no written national constitution setting out the fundamental principles from which the rights and responsibilities of citizens are derived, the Human Rights Act 1998 incorporated into law nearly all the rights contained in the European Convention on Human Rights, and gives citizens a clear legal statement of their basic rights and fundamental freedoms. The Act became fully operational in October 2000. With regard to education, under the Act, no person shall be denied a right to an education. In the exercise of any functions which it assumes in relation to education and to teaching, the State shall respect the right of parents to ensure such education and teaching in conformity with their own religious and philosophical convictions. This does not require the Government to provide or subsidise any specific type of education. Although parents have a right to ensure their religious or philosophical beliefs are respected during their children's education, this is not an absolute right. So long as these beliefs are properly considered, an education authority can depart from them but only if there are good reasons for doing so and it is done in an objective, critical and pluralistic way. Public bodies, including education authorities and individual education institutions at all phases, are also bound by a framework of equality legislation that operates across a number of social categories, including gender, sexual orientation, disability, age, race, and religion and belief. This legislation applies to their role as education providers and also to their role as employers. There is also a body of employment legislation which education authorities and institutions must comply with in their role as employers. Schools

A fundamental principle of compulsory education is set out in section 7 of the Education Act 1996, which places the responsibility for a child's education on his/her parents: 'The parent of every child of compulsory school age shall cause him to receive efficient full-time education suitable:

- to his age, ability and aptitude, and
- to any special educational needs he may have, either by regular attendance at school or otherwise.'

For the majority of children, this means education by attendance at a maintained school. Section 78 of the Education Act 2002 sets out the general requirements for the curriculum for a maintained school which must be: 'a balanced and broadly based curriculum which:

- promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, and
- prepares pupils at the school for the opportunities, responsibilities and experiences of later life.'

The Children Act 2004 aimed to maximise opportunities and minimise risks for all children and young people, by integrating children's services and focusing these services more effectively around the needs of children, young people and families. The Act introduced:



- integrated teams of health and education professionals, social workers and advisers based in and around schools and children's centres
- a clear framework of accountability at national and local level, by the appointment of a Director of Children's Services with responsibility for education and social services in every local authority in England
- new Children's Commissioners to act as 'champions for young people'.

The Education Act 2005 provided the legislative framework to support the policy developments set out in A New Relationship with Schools (DfES and Ofsted, 2004) and the Five Year Strategy for Children and Learners (DfES, 2004). The Act aimed to raise standards for all children by promoting greater autonomy and diversity in the education system. Reforms introduced under the Act included changes to the school inspection system which aimed to make it more efficient and effective (see the article on 'Quality Assurance in Early Childhood and School Education'); three-year budgets for all schools based around the academic year; the introduction of the 'School Profile', bringing together key information on a school into one document (this duty was abolished under the Education Act 2011, with effect from 1 February 2012) ; an extension of the remit of the Teacher Training Agency (which became the Training and Development Agency for Schools (TDA) and is now the Teaching Agency) and the establishment of a common basis for the inspection of education and day-care services delivered in children's centres and extended schools. The Education and Inspections Act 2006, passed in November 2006, provided the legislative basis to implement the reform proposals set out in the White Paper Higher Standards, Better Schools for All (GB. Parliament. HoC, 2005). Amongst others, it included provisions to:

- introduce better discipline in schools by providing for a new power for teachers and other school staff to discipline pupils; extend the scope of parenting orders and parenting contracts; and require parents to take responsibility for excluded pupils in their first five days of exclusion
- place new duties on local authorities to promote the fulfilment by children of their educational potential, to promote diversity and choice in their provision of schools, to consider representations from parents about school provision in their area, and to identify children not receiving education
- place a duty on governing bodies of certain foundation schools to establish parent councils, and on the governing bodies of all maintained schools to have regard to the views of parents
- introduce a new single inspectorate (in England) for children and learners
- introduce a duty on school governing bodies to promote the well-being of their pupils, to promote community cohesion and to have regard to the Children and Young People's Plan
- ban the practice of interviewing prospective new pupils and/or their parents, and require schools to 'act in accordance with' rather than 'have regard to' the new School Admissions Code
- introduce new nutritional standards for all food and drink supplied on school premises, and for food and drink provided by local authorities or governing bodies at other places.

The Education and Skills Act 2008 introduced the requirement for all young people to participate in education or training until their 18th birthday through either full-time education or training; work-based learning; or part-time education or training. The minimum age at which young people can leave learning will be increased in two stages – to 17 from 2013 and to 18 from 2015. The first cohort to be affected by the changes began secondary education (Year 7, age 11) in September 2008.

The Academies Act 2010 made provision to reform how schools are governed and funded. It allowed for the creation of more academies and enabled all primary, secondary and special schools to convert to academies if they wish. Academies are publicly funded independent schools which have individual funding agreements directly with the Secretary of State and enjoy freedoms relating to organisation and the curriculum. See the subheading ‘Types of Institution’ in the article on ‘Organisation of General Lower Secondary Education’ for further information.

In December 2010, the Department for Education (DfE) published a White Paper for schools which set out plans for whole-system reform. The proposals set out in The Importance of Teaching: the Schools White Paper (DfE, 2010) were legislated for by the Education Act 2011 which received Royal Assent in November 2011. These include:

- School discipline: teachers have been given powers to search pupils for banned items and provided with better protection from false allegations made by pupils. Exclusion appeal panels have been replaced by review panels which will not have the power to force a school to reinstate an excluded pupil.
- The academies programme is being expanded. Secondary academies no longer need to have a curriculum specialism. Two new types of academy have been created: 16 to 19 academies and alternative provision academies. The duty on local authorities (LAs) to provide School Improvement Partners (SIPs) to each of their maintained schools has been removed. Schools are able to buy in this type of support from their own budgets, should they feel it is required.
- Changes have been made to the inspections framework for schools (see the subheading ‘Improving the Quality and Efficiency of Education and Training’ in the article on ‘Education and Training 2020 Strategic Framework’).
- Maintained schools may be required to take part in international surveys of school and pupil performance.
- The Secretary of State will be able to direct a local authority to issue a warning notice to a school on grounds of performance or safety concerns, and the Secretary of State's power to close schools will be extended to all schools eligible for intervention, rather than (as at present) only those deemed by Ofsted to be in need of special measures.
- Early years provision (the ‘free entitlement’, notionally 15 hours a week for 38 weeks a year) will be offered to 2-year-olds from disadvantaged families (see the article on ‘Organisation of Programmes for Children over 2–3 Years’).
- The Young Peoples Learning Agency (YPLA), the General Teaching Council England (GTCE), the Training and Development Agency for Schools (TDA),

and the Qualifications and Curriculum Development Agency (QCDA) have been abolished, with their functions being extinguished or transferred – see the article on ‘Administration and Governance at Central and/or Regional Level’.

## **Lifelong Learning Strategy**

There is no single definition of lifelong learning in the UK context. It can be understood in a number of ways:

- adults who have left formal education and training and returned at a later date
- learning through all stages of life, that is from birth to death
- learning undertaken by the economically active.

The legal framework refers instead to further education. This is defined in the Further and Higher Education Act 1992 as follows:

- full-time and part-time education suitable to the requirements of persons over compulsory school age (16 years), including vocational, social, physical and recreational training
- organised leisure-time occupation provided in connection with such education.

## **National Strategies relating to Lifelong Learning**

There is no overarching national strategy for lifelong learning. However, the skills strategy set out in Skills for Sustainable Growth (BIS, 2010) and Investing in Skills for Sustainable Growth (BIS, 2010) (both available on the Skills Strategy website) contain some provisions relevant to lifelong learning. The strategy is based on the principle that: ‘Government funds are limited and we will prioritise funding support for learners with very low levels of skills or the disadvantaged, while there will be an expectation that learners and employers will co-invest alongside Government in meeting the costs of intermediate and higher level training courses from which they will derive private benefits.’ The skills strategy has been taken forward in New Challenges, New Chances: Further Education and Skills System Reform Plan (BIS, 2011) in which the Government states that it will fund provision for those who did not achieve basic English and maths in school; young people aged 19 up to 24 to help them to progress; unemployed people on benefits who are looking for work; and those at risk of social exclusion.

## **Ongoing Reforms and Policy Developments**

The article on ‘Education in the Europe 2020 Strategy’ describes policy developments in areas of concern in education and training identified in the Europe 2020 strategy. Europe 2020 is the European Union’s 10-year strategy for ‘smart, sustainable and inclusive growth’. The article on ‘Education and Training 2020 Strategic Framework’ covers initiatives related to the priorities of the Strategic Framework for European cooperation in education and training (‘ET 2020’), adopted

by the Council of the European Union in May 2009. The article on ‘Specific Ongoing Reforms and Policy Developments at National Level’ gives information on other recent national policy developments in England. The UK Government, formed by a coalition of the Conservative and Liberal Democrat parties, took office on 11 May 2010, following three terms of Labour Government since 1997. On 20 May 2010, the new Government announced its programme for government for the next five years. The programme includes the following priorities for education in England – many of which have since been taken forward:

- enabling parents, charities, community groups and teachers to establish new schools (see the subheading ‘Academies and Free Schools’ in the article ‘Specific Ongoing Reforms and Policy Developments at National Level’)
- giving schools greater freedom in organising and delivering the curriculum (see the subheading ‘2014 National Curriculum’ in the article ‘Specific Ongoing Reforms and Policy Developments at National Level’)
- introducing a ‘Pupil Premium’ to increase spending on pupils from the poorest backgrounds (see the article on ‘Promoting Equity, Social Cohesion and Active Citizenship’)
- reforming pay and conditions rules to give schools greater freedom to reward good teachers and address poor performance (see the subheading ‘Teacher Reforms’ in the article ‘Specific Ongoing Reforms and Policy Developments at National Level’)
- targeting inspections on areas of failure with less frequent inspections for successful education establishments (see the article on ‘Improving the Quality and Efficiency of Education and Training’)
- creating greater flexibility in the examinations system, including the introduction in state schools of the international or iGCSE (taken by 16-year-olds), alongside the qualifications already on offer for this age group
- reforming school league tables so that schools are able to focus on, and demonstrate, the progress of children of all abilities
- giving heads and teachers greater powers to promote good behaviour in the classroom and tackle bullying (see the subheading ‘Education Act 2011’ in the article ‘Specific Ongoing Reforms and Policy Developments at National Level’)
- developing ways of supporting the creation of Apprenticeships, internships, work pairings and college and workplace training places, as part of the wider programme to stimulate employment (see the article ‘Education in the EU2020 Strategy’)
- removing direct state control of further education (FE) colleges and abolishing many non-departmental public bodies involved in the administration of FE
- targeting public funding of the FE sector so that it follows student choice
- supporting the provision of free nursery care for pre-school children by a diverse range of providers (see the subheading ‘Early Childhood Education and Care’ in the article ‘Specific Ongoing Reforms and Policy Developments at National Level’)
- increasing Sure Start’s focus on the neediest families, including through the better involvement of organisations with a track record of supporting families (Sure Start is the government programme which provides integrated services

to pre-school children and their families); and investigating ways of ensuring providers are paid in part by the results they achieve.

## Education in the Europe 2020 Strategy

Europe 2020 is the European Union's 10-year strategy for smart, sustainable and inclusive growth. The strategy identifies a number of key areas which concern the field of education and training: a common headline target with twin targets on early school leaving and higher education participation; country specific recommendations; the Annual Growth Survey under the European semester of economic governance; the question of investment in education; and the agenda for new skills and jobs.

## Investment

The Government's Spending Review, published in October 2010, fixed budgets up to 2014/15. The Government has prioritised spending that supports growth, such as increasing core funding for schools, expanding adult Apprenticeships and funding world class research. The education settlement supports a comprehensive approach to narrowing the attainment gap and improving social mobility. The Plan for Growth (HM Treasury and BIS, 2011) is the Government's plan to achieve sustainable, long-term economic growth. It sets out how conditions for economic growth and recovery will be created, helping to reduce cyclical youth unemployment.

The independent Heseltine Review looked at how to increase growth in the economy. Published in October 2012, the Review's report, No Stone Unturned in Pursuit of Growth, includes several recommendations about education and skills as the 'foundation for growth and prosperity'. These include: embedding engagement with business deeper into the school curriculum; and that further education colleges should consult and agree their provision with local enterprise partnerships (LEPs) to ensure it reflects local labour market requirements. In its response, the Government accepted the great majority of the recommendations in full or in part.

## The Annual Growth Survey

The Annual Growth Survey (AGS) 2013 launches the 2013 European semester of economic governance. It is the basis for building the necessary common understanding about the priorities for action at national and EU level for the next 12 months, which should then feed into national economic and budgetary decisions. The 2013 Annual Growth Survey identifies five reform areas in relation to education and training in the European Union. These are to:

- raise the performance of education and training systems and overall skill levels, and link the worlds of work and education more closely together
- reduce early school leaving and facilitate the transition from school to work by developing quality Traineeships, Apprenticeships and dual learning models – classroom-based education combined with hands-on experience in the work





Lifelong Learning Programme



**Q4I**  
**Quality for Innovation in European Schools**  
**Project N°: 527906-LLP-1-2012-1-ES-COMENIUS-**  
**CMP**

place. Efforts to develop entrepreneurial skills are needed to support new business creation and improve employability levels of the young

- develop and implement 'Youth Guarantee' schemes whereby every young person under the age of 25 receives an offer of employment, continued education, an Apprenticeship or a Traineeship within four months of leaving formal education or becoming unemployed. Such schemes can be co-financed by the European Social Fund
- improve access to lifelong learning systems throughout working life, including for older workers, by strengthening partnerships of public and private institutions involved in the provision, application and updating of specific skills
- improve the connection between education and lifelong learning systems and labour market needs. Short-cycle tertiary qualifications of two years, focused on areas where a skills shortage has been identified, as well as targeted mobility schemes, can prove particularly effective in current circumstances.

In April 2013 the Government published Rigour and Responsiveness in Skills (BIS, 2013), a follow up skills strategy to the 2010 strategy Investing in Skills for Sustainable Growth (BIS, 2010). The new strategy takes forward the modernisation of the vocational skills sector with a strong emphasis on courses and qualifications which are rigorous and responsive to the needs of employers. The strategy is set out around the following key themes:

- raising standards by making the system more professional (including the introduction of a new chartered status for further education colleges) and intervening in poor provision
- creating the Traineeships programme to prepare young people for work (these began in August 2013 – see the subheading 'Country Specific Recommendations' above)
- continuing the reform of Apprenticeships with an increased focus on employer input (see below)
- continuing to make qualifications relevant and valued – this is being addressed through reforms following the Wolf Review for qualifications for 14- to 19-year-olds (see the article on 'Specific Ongoing Reforms and Policy Developments at National Level') - and vocational qualifications for adults will now be reviewed and the number reduced
- using funding to make provision more responsive – in the current economic climate available funding must be deployed to the greatest effect
- giving employers and individuals better information to make effective choices.

Building Engagement, Building Futures (BIS, 2011) sets out the Government's strategy to:

- achieve full participation of 16- to 17-year-olds in education and training
- help 18- to 24-year-olds to engage in education and training
- support 18- to 24-year-olds into employment
- support 18- to 24-year-olds on inactive benefits and those in disadvantaged groups.



The rise in the participation age to 17 from 2013 and to 18 from 2015 as well as initiatives such as the Youth Contract and the Traineeships scheme are taking this strategy forward and are explained under the subheading 'Country Specific Recommendations' above. See also the information on 'Early School Leaving' under the subheading 'Headline Targets for Education and Training'. In New Challenges, New Chances: Further Education and Skills System Reform Plan (BIS, 2011), the Government set out its plans to improve Apprenticeships, focusing on where they bring the greatest returns and wider benefits, including targeting younger adults, new employees, higher level qualifications and particular sectors where investment will make the greatest impact. Since April 2011, all Apprenticeship programmes have been required to comply with the Specification of Apprenticeship Standards for England (BIS, DFE and SFA, 2013). An independent review of the future of Apprenticeships in a changing economy – the Richard Review (BIS, 2012) – made recommendations to government in November 2012. These included redefining Apprenticeships, focusing more rigorously on the outcomes of Apprenticeships and offering appropriate government incentives for Apprenticeships. Central to the findings of the Richard Review is that employers should be at the heart of the design and delivery of Apprenticeships. The relationship between the individual apprentice and the employer is key, with the Government's role being to support the employer to meet the required standards. The Government is taking forward the recommendations of the Richard Review through initiatives such as the Employer Ownership Pilot (EOP), which gives employers direct control of public funding for Apprenticeships and enables them to purchase the appropriate training for their business and apprentices. See above for further details of the Apprenticeship reforms as set out in the new skills strategy Rigour and Responsiveness in Skills (BIS, 2013).

### **New Skills for New Jobs**

'New Skills for New Jobs' is a European Commission initiative in support of the EU's employment target for 2020: to have 75 per cent of the working-age population (aged 20–64 years) in work. It focuses on:

- promoting better anticipation of future skills needs
- improving the match between skills and labour market needs
- bridging the gap between the worlds of education and work.

The Plan for Growth (HM Treasury and BIS, 2011) is the UK Government's plan to achieve sustainable, long-term economic growth. One of the four ambitions underpinning the plan is the desire 'to create a more educated workforce that is the most flexible in Europe'. One action in this area is to work with key sectors in the economy to ensure that the skills system is delivering what the sector needs. The new skills strategy, Rigour and Responsiveness in Skills (BIS, 2013), published in April 2013, takes this forward with a key emphasis on ensuring that education and training providers have the flexibility to deliver what is really wanted by learners and employers.

Bridging the gap between the worlds of education and work is the focus of many of the initiatives relating to early school leaving and participation such as the Youth Contract and the Traineeships programme. See the subheading 'Country Specific Recommendation' above for more details. The Government also supports those aged 24+ who want to retrain or up-skill at level 2 in order to secure different employment and/or improve their life chances. For adults aged over 24 who wish to do full level 3 (two A levels or the vocational equivalent) or level 4 (higher vocational education equivalent to ISCED 5B) in order to qualify for a professional job and/or progress to higher education, '24+ advanced learning loans' have been introduced. See the article on the 'National Qualifications Framework' for information on qualification levels.

In April 2012, the National Careers Service was launched, building on the former 'Next Step' service. It provides information, advice and guidance on careers, skills and the labour market, covering further education, Apprenticeships and other types of training and higher education. In June 2012, Ofsted (the Office for Standards in Education, Children's Services and Skills) published Skills for Employment, which assessed the efficiency of systems in matching unemployed adults to training provision and the effectiveness of this provision in developing employability skills and supporting progression into sustained employment. The report made recommendations for the Department for Business, Innovation and Skills (BIS) and for training providers. For the former, recommendations included prioritising the provision of work-related English and mathematics, while for the latter they included ensuring that provision makes a difference to participants' chances of sustained employment. A review of business-university collaboration was published in February 2012 (Wilson, 2012). This called for universities to be at the heart of the economy, to promote growth in the UK and to improve the employability of graduates. Recommendations included increasing opportunities for students to acquire relevant work experience, such as sandwich degree programmes, internships and work-based programmes. The review also found that growth in foundation degrees (short first cycle vocational programmes equivalent to ISCED 5B), designed and targeted at students with vocational qualifications, could provide progression routes, whilst meeting the high vocational skills needs of industry. In June 2012, the Department for Business, Innovation and Skills (BIS) published a report which stated that there is a wide consensus across stakeholders on the broad thrust of these recommendations and which set out the next steps for universities, business and government. In June 2013 the initial findings of a review of universities and growth were published. These include ensuring universities play a stronger role in economic development and improving access for small- and medium-sized enterprises (SMEs) to universities, including a stronger role for university business schools to provide support to SMEs. The final report will be published later in 2013.

## **Making Lifelong Learning and Mobility a Reality**

### **Lifelong Learning Strategies**

The strategy Skills for Sustainable Growth (BIS, 2010), published in November 2010, set out the Government's reform plans for the further education (FE) and skills

system. The strategy aimed to ensure that those who have left school without basic skills in literacy or numeracy will continue to have access to government funded training. It also set out a system of government-backed loans – the 24+ advanced learning loans – which came into effect in September 2013, to help learners aged 24 and over to finance other intermediate and higher-level qualifications. The new skills strategy Rigour and Responsiveness in Skills (BIS, 2013) takes forward the modernisation of the vocational skills sector – see the subheading ‘Annual Growth Survey’ above for more details. The right to request time away from work to train was introduced in April 2010 for large organisations employing over 250 people, under the Apprenticeships, Skills, Children and Learning Act 2009.

### European Reference Tools

The European Qualifications Framework for Lifelong Learning (EQF) is an overarching qualifications framework, a ‘meta-framework’, designed to serve as a translation device to make qualifications more readable and understandable across different countries and systems in Europe. The principal aims of the EQF are to promote citizens’ mobility between countries and to facilitate their lifelong learning. The work to reference the five qualifications frameworks in established use in the UK to the EQF was completed in 2010. Of these five frameworks, three apply to England, Wales and Northern Ireland and together accommodate the majority of qualifications in use in the various sectors of education, training and lifelong learning, including higher education. These are: the Qualifications and Credit Framework (QCF); the National Qualifications Framework (NQF); and the Framework for Higher Education Qualifications for England, Wales and Northern Ireland (FHEQ). The QCF and the NQF contain levels designed to recognise learning achievements below the level normally represented by vocational, pre-vocational or general educational qualifications. These levels have particular significance for lifelong learning, as the recognition they provide for achievements at these levels is an encouragement to learners to take further steps on the qualifications ladder. The structure of the QCF, which was formally introduced in 2008, is also of particular relevance to lifelong learning, as it aims to enable learners to gain qualifications at their own pace along flexible routes by awarding credit for qualifications and units. Further information is available in the Eurypedia article on the ‘National Qualifications Framework’ and from the Office of Qualifications and Examinations Regulation (Ofqual).

A Joint Steering Group on Outward Student Mobility was formed in 2011 to review the obstacles and incentives to outward student mobility in the UK. The group reported to the Universities and Science Minister in May 2012. The report’s principal recommendation was the development of a national strategy for outward mobility supported by a body to facilitate and promote best practice, effectiveness and professionalism in this area. In addition, the Government announced a replacement for the Erasmus fee waiver under which students in England were not charged a tuition fee when taking a year abroad under the Erasmus Scheme. The new support, which takes effect from 2014/15, will allow English higher education (HE) institutions to charge students up to 15 per cent of the maximum fee cap when taking a year abroad. It will apply not just to Erasmus students, but to all students on a study

abroad exchange programme, thus levelling the playing field between European and international mobility. An Outward Student Mobility programme team has been established at the UK Higher Education International Unit to lead on the delivery of the strategy in conjunction with key stakeholders. The strategy has been consulted on over summer 2013 and is expected to be published early in the 2013/14 academic year. It is expected to include a range of activities including:

- research and data collection
- a promotion and awareness-raising campaign for study and work placements overseas
- coordination of financial support for mobility opportunities
- services provided by higher education institutions (HEIs) to build capacity and influence
- an online hub for all information and resources relevant to outward student mobility.

In July 2013, the Government also published its International Education Strategy: Global Growth and Prosperity (HM Government, 2013) which sets out plans for strategic development in the areas of international students; UK schools and colleges operating overseas; Massive Open Online Courses (MOOCs); developing international participations; and building the UK brand under the banner of 'Education is GREAT Britain'.

### Professional Development of Teachers, Trainers and School Leaders

In its 2010 Schools White Paper, The Importance of Teaching (for more information see the article on ' Specific Ongoing Reforms and Policy Developments at National Level'), the Government announced its intention to provide stronger incentives for the best graduates to go into teaching, especially in shortage subjects. Information about funding for postgraduate teacher training in 2013/14, including information on incentives, is available from the National College for Teaching and Leadership. The Government is also expanding Teach First, the programme which places excellent graduates in secondary schools in low income communities. Further information is available. School Direct, a new route into teaching was introduced in the 2012/13 academic year. Schools select and recruit their trainees working with teacher training providers. Further information is available. The National Scholarship Fund also provides financial support for teachers and special educational needs (SEN) support staff to develop their skills and deepen their subject knowledge. The National College for Teaching and Leadership was formed in April 2013 by the merger of the National College for School Leadership and the Teaching Agency. The single body is responsible for teacher training, continuing professional development and supporting school improvement. It aims to improve the quality of the education workforce and to help schools help each other to improve. In August 2013 the Education and Training Foundation was launched. Funded by the Department for Business, Innovation and Skills (BIS), the Foundation aims to improve professionalism and standards in the further education and skills sectors.

## Efficient Funding and Evaluation

A new framework for school inspection came into force in September 2012 and was updated in September 2013 (Ofsted, 2013). Inspections now have a sharper focus on those aspects of schools' work that have the greatest impact on raising achievement. These are: the achievement of pupils at the school; the quality of teaching in the school; the behaviour and safety of pupils at the school; and the quality of leadership in, and management of, the school. Inspections continue to consider the spiritual, moral, social and cultural development of pupils at the school and the extent to which the education provided by the school meets the needs of the range of pupils at the school, and in particular, the needs of disabled pupils and those who have special educational needs. New school funding arrangements have been introduced in the 2013/14 school year. The reforms aim to move towards a nationally consistent funding system, led by the needs of pupils. A national funding formula will be introduced in the next Spending Review period (from 2015) which will ensure that schools in similar circumstances and with similar intakes receive similar levels of funding. In preparation for this the way schools are funded has already been simplified so that there is greater consistency between local funding formulae. A key measure introduced to achieve this is the significant reduction of the number of factors which local authorities can use in their funding formulae for allocating funding to schools. The factors which are allowed are mostly to do with pupil characteristics rather than school characteristics. Further information on the reforms is available. Details of the school funding settlement 2013/14 are available [here](#). In June 2013 the Department for Education (DfE) published a Review of Efficiency in the Schools System (DfE, 2013), looking at the relationship between how schools allocate their budgets and the results they achieve. The review seeks to highlight good practice to support schools in securing value for money [here](#).

## Enhancing Creativity and Innovation, Including Entrepreneurship, at all Levels of Education and Training

### Partnerships with Business, Research and Civil Society

Partnerships with business, research and society are embedded in the education system. For example, school governing bodies include representatives from the local community and, where appropriate, from religious organisations. Sponsored academies and free schools (publicly funded independent schools) have significant input from business, community or religious groups. See the article on 'Administration and Governance at Local and/or Institutional Level ' for more information on academies and free schools. Employers are involved in the development of vocational qualifications and Apprenticeships – and reforms outlined in the strategy document *Rigour and Responsiveness in Skills* (BIS, 2013) are taking this further (see the subheading 'Annual Growth Survey' above). The influential Wolf Report (see the article on 'Specific Developments and Ongoing Reforms at National Level' ) stated that employers are best placed to understand and evaluate vocational qualifications specific to their sector, and the Government has recently announced that only 'Tech levels' – vocational qualifications which have the support of a



professional body or five employers that represent the sector involved – will be included in school performance tables. The Government has also recently called for greater employer involvement in careers guidance in schools.

A review of business-university collaboration was published in February 2012 (Wilson, 2012). This called for universities to be at the heart of the economy, to promote growth in the UK and to improve the employability of graduates. In higher education, the Higher Education Innovation Fund (HEIF) – provided by the Higher Education Funding Council for England (HEFCE) – supports institutions to engage in a broad range of activities with business, public sector and community partners. The Higher Education Statistics Agency (HESA) also undertakes the annual Higher Education – Business and Community Interaction (HE BCI) Survey, which collects data on knowledge exchange between higher education institutions (HEIs) and the wider world of business and the community. HEFCE publishes a more detailed analysis of the HE-BCI data.

Transversal Key Competences, Entrepreneurship Education, e-literacy, Media Literacy, Innovative Learning Environments

Inspiring the Future' is an initiative which coordinates volunteers from all employment sectors and professions going into secondary schools and colleges to talk about their jobs and the sectors they work in. The scheme, which was launched in July 2012, is backed by the main teaching unions and employer representative bodies. It is coordinated by the Education and Employers Taskforce, a charitable body which aims to ensure all schools and colleges have effective partnerships with employers. The Government recognises that the best route out of unemployment for some young people may be to start up their own business. In the Budget 2012, it stated its intention to pilot the introduction of enterprise loans to help young people set up and grow their own business, alongside existing support such as the New Enterprise Allowance.

In May 2012, the Department for Business, Innovation and Skills (BIS) announced a new scheme as part of the Government's enterprise education package to connect entrepreneurial university students and graduates with small and medium-sized enterprises (SMEs). 'Milk round' recruitment event fairs on campus, run in association with university entrepreneurship societies, aim to give students and SMEs the opportunities to arrange summer placements, develop entrepreneurial skills levels and create graduate jobs.

## **Specific Ongoing Reforms and Policy Developments at National Level**

### **Organisational Reform**

Following the change of government in May 2010, the Department for Education (DfE) was created, taking over responsibility for pre-school, primary and secondary education from the former Department for Children, Schools and Families (DCSF). The Department for Business, Innovation and Skills (BIS) remained responsible for



further and higher education and skills. Three new executive agencies of the DfE have been formed:

- Standards and Testing Agency (formed on 1st April 2012)
- Education Funding Agency (formed on 1st October 2011)
- National College for Teaching and Leadership (formed by the merger, in April 2013, of the Teaching Agency, itself a recently created executive agency of the DfE, and the National College for School Leadership).

These executive agencies are formally part of the DfE, but operate with a degree of autonomy from the main department. They have taken over some of the duties and responsibilities of the former arm's length public bodies (ALBs) (often described as non-departmental public bodies), which closed as part of a wide-ranging reform of public bodies.

#### Schools White Paper December 2010

In December 2010, the Department for Education (DfE) published a White Paper for schools which set out plans for whole-system reform. Proposals in The Importance of Teaching (DfE, 2010), many of which have been taken forward already and are discussed in this article, included:

- reforming initial teacher training to increase the amount of time trainees spend in the classroom, and establishing 'teaching schools' which would specialise in the initial training of teachers
- reforming the curriculum to reduce prescription, whilst refocusing on the core subject knowledge pupils need at each stage of their education
- introducing the 'English Baccalaureate' – as a school performance measure rather than a qualification for students, which recognises where students have achieved a GCSE grade C or above in a core of academic subjects – English, mathematics, history or geography, the sciences and a language (see the article on 'Assessment in General Lower Secondary Education')
- reforming school inspection so that inspectors spend more time in the classroom evaluating teaching and learning
- targeting more resources on the most deprived pupils through a new 'Pupil Premium' (see the article on 'Promoting Equity, Social Cohesion and Active Citizenship')
- giving all children a phonics-based progress check in Year 1 (age five to six).

#### Education Act 2011

The following measures have been implemented under the provisions of the Education Act 2011 which took forward the principles and proposals of the Schools White Paper (see above):

- School discipline: teachers have been given powers to search pupils for banned items and provided with better protection from false allegations made

- by pupils. Exclusion appeal panels have been replaced by review panels which do not have the power to force a school to reinstate an excluded pupil.
- The academies programme is being expanded. Secondary academies no longer need to have a curriculum specialism. Two new types of academies have been created: 16 to 19 academies (for 16- to 19-year-olds) and alternative provision academies. Existing academies are now known as 'academy schools'.
  - The duty on local authorities (LAs) to provide School Improvement Partners (SIPs) to each of their maintained schools has been removed. Schools are able to buy in this type of support from their own budgets, should they feel it is required.
  - Changes have been made to the inspections framework for schools (see the subheading 'Improving the Quality and Efficiency of Education and Training' in the article on 'Education and Training 2020 Strategic Framework').
  - Maintained schools may be required to take part in international surveys of school and pupil performance.
  - The Secretary of State can direct a local authority to issue a warning notice to a school on grounds of performance or safety concerns, and the Secretary of State's power to close schools is being extended to all schools eligible for intervention, rather than (as at previously) only those deemed by Ofsted to be in need of special measures.
  - Early years provision: the 'free entitlement', notionally 15 hours a week for 38 weeks a year, is offered to two-year-olds from eligible disadvantaged families (see the subheading below on 'Early Childhood Education and Care').
  - The Young People's Learning Agency (YPLA), the General Teaching Council for England (GTCE), the Training and Development Agency for Schools (TDA), and the Qualifications and Curriculum Development Agency (QCDA) have been abolished, with functions being extinguished or transferred to the Secretary of State.

## Academies and Free Schools

Academies are publicly funded schools that are independent of local authorities. It is the Government's ambition to help every school which wishes to do so to become an academy. Academies are a distinct school type with a greater level of autonomy – see the article on 'Administration and Governance at Local and/or Institutional Level'. Although the first academies opened in 2002, in most cases these replaced weak or underperforming secondary schools. The Academies Act 2010 enabled all maintained schools, including primary, secondary and special schools, to apply to become an academy and simplified the process. The Education Act 2011 enabled the academies programme to be further extended by allowing the establishment of 16 to 19 academies (for 16- to 19-year-olds) and alternative provision academies, and to remove the requirement for academies to have a curriculum specialism. On 1 September August 2013 there were 3 304 academies open in England (including primary, secondary and special education academies). There is considerable variation across local authorities as to the proportions of maintained/academy schools in the area. A list of open academies and academy projects in development

is updated monthly by the Department for Education. As well as encouraging existing schools to convert to academy status, the Government has introduced changes to enable more new providers to enter the publicly funded school system in response to parental demand. The Academies Act 2010 makes it easier for groups of parents, teachers, charities, trusts and religious and voluntary groups to set up 'free schools'. Once established, these free schools are legally academies. In September 2011, the first (24) free schools opened across England and, by May 2013, this number had grown to 81 with a further 109 due to open from September 2013 onwards.

### Early Childhood Education and Care

Free (government-funded) early education is available to all three- and four-year-old children in England for 15 hours per week (and for 38 weeks a year). This entitlement is being extended to the most disadvantaged two-year-olds. Prior to September 2013 there were 20 000 disadvantaged two-year-olds in free early education. The introduction of the new extended entitlement is being phased in so that around 20 per cent of the most disadvantaged two-year-olds became eligible in September 2013, and will increase to around 40 per cent from September 2014. Sure Start Children's Centres provide access to integrated early education and childcare services in every community. Local authorities have a statutory duty to ensure there are sufficient centres to meet the needs of the area. The primary goal of centres is improving outcomes for young children and families, with a particular focus on the most disadvantaged, to reduce inequalities in: child development and school readiness; parenting aspirations and parenting skills; and child and family health and life chances. The Government will ensure centres deliver proven early intervention programmes to support families in the greatest need through: a reformed Ofsted inspection framework; the trialling of payment by results arrangements; and the increased involvement of parents, communities and other organisations. Following the independent 'Tickell' review (2011), a revised and slimmed down Statutory Framework for the Early Years Foundation Stage (birth to age five) (DfE, 2012) came into force in September 2012. The revised framework is designed to:

- simplify the learning and development requirements by reducing the number of early learning goals from 69 to 17
- simplify the statutory assessment of children's development at age five
- place stronger emphasis on the three prime areas of communication and language; physical development; and personal, social and emotional development
- introduce a progress check at age two to be carried out by health visitors (registered nurses or midwives who have undertaken specialised training) to ensure children get any additional support they need before they start school
- strengthen partnerships between professionals and parents.

The Department for Education published a report entitled More Great Childcare (DfE, 2013) in January 2013, outlining government plans to raise the status and quality of the early years education and childcare workforce, remove unnecessary burdens on

providers, improve the regulatory regime and give more choice to parents. The reform of the early years workforce includes the following measures:

- Early years teachers in early years settings will be graduates on a par with school teachers (but will not hold Qualified Teacher Status – QTS).
- Early years educators (not teachers) will hold A level equivalent qualifications and provide support to early years teachers. They will often act as assistants to early years teachers, or may deliver teaching, learning and childcare themselves.
- From September 2013, early years teacher trainees will have to meet the same entry requirements as primary trainee teachers – including at least a GCSE grade C in English, mathematics and science, or equivalent.
- From September 2014, early years teacher trainees will have to pass the same skills tests as classroom teacher trainees before they start their course (see the article on ‘Initial Education for Teachers working in Early Childhood and School Education’).

In July 2013, the Government also published More Affordable Childcare (DfE, 2013) which sets out plans for improving the supply of affordable childcare by helping schools offer more care out of school hours and at holiday times; relaxing planning and regulatory requirements for childcare providers; and supporting parents to access more informal care.

### Assessment and Accountability in Primary Education

In November 2010, the Secretary of State for Education set up a review into testing, assessment and accountability at key stage 2 (Years 3 to 6 - ages 7 to 11). The final report of the review was issued in June 2011 and, in July 2011, the Government accepted all recommendations in full. These included significant changes to the end of key stage 2 statutory testing arrangements, which have since been phased in:

- Replacing the current writing test in Year 6 (at the end of key stage 2), with teacher assessment of writing composition from 2013. This aims to ensure that pupils can be more creative and to overcome the dangers of teaching to the test. This teacher assessment will make up the larger part of the overall writing judgement.
- Introducing a test of some of the essential skills needed to become fluent, confident writers – spelling, grammar, punctuation and vocabulary from 2012/13.
- Publishing more data in the primary school performance tables, including new three-year rolling averages for the end of key stage 2 assessments from 2012, to give a more rounded picture of a school’s performance.
- Primary schools providing more information on pupils’ performance to secondary schools, so that Year 7 teachers (receiving 11-year-olds in secondary schools) are clear right from the outset about children’s attainment and the areas where extra work is needed.

In July 2013 the Government launched a consultation on proposed measures to raise standards in primary schools. These include:

- Higher floor standards: these are the minimum standards for pupil attainment that the Government expects schools to meet. It is proposed that 85 per cent (currently 60 per cent) of a school's pupils (except those with particular special needs) should be expected to reach a good level of attainment. Progress will also be a key element to be reported to reflect the challenging intakes of some schools.
- Updated tests for 11-year-olds, in line with the higher expectations of the new National Curriculum (to be introduced starting in September 2014). The tests will be in mathematics; reading; and spelling, punctuation and grammar. The science test for a sample of pupils will also remain.
- Schools will be able to design their own systems of measuring pupil performance and reporting this to parents. Ofsted will need to see evidence of pupils' progress but inspections will be based on whatever pupil tracking data schools choose to keep.
- A new reporting method which will see each pupil compared against their peers nationally. Each pupil will be placed in 10 per cent bands, or deciles. Pupils' positions will only be made available to parents and schools.
- A baseline assessment to measure the progress that has been made by 11-year-olds.

## 2014 National Curriculum

A new National Curriculum will be introduced in primary and secondary schools in England in September 2014 for key stages 1 to 4 (5 to 16 years). This follows a major review of the National Curriculum in England which began in January 2011. An Expert Panel, appointed by the Secretary of State to provide an evidence base drawing on best practice, published its initial findings and recommendations in December 2011. Among the Panel's recommendations were that all existing National Curriculum subjects should be retained as compulsory subjects, the level of prescription reduced, and that modern languages should be introduced as a compulsory subject at key stage 2 in primary schools. The final 2014 National Curriculum was published in September 2013 for first teaching in schools from September 2014. Further information including the programmes of study is available from the Department for Education. All subjects included in the current National Curriculum have been retained at primary and secondary level, with modern foreign languages being added as a compulsory subject at key stage 2 (ages 7–11). Apart from in the core subjects (English, mathematics and science) the programmes of study have been slimmed down and now focus on the essential skills and knowledge which every child should master. The programmes of study for English, mathematics and science have been made more demanding than the current National Curriculum in order to raise standards and align England with countries which have high-performing education systems. The current system of levels and level descriptors – which is considered to be confusing for parents and bureaucratic for teachers – is being removed and will not be replaced. The new programmes of study emphasise



what pupils should know and be able to do, setting out the content that each child should be expected to master each year. Schools will be able to introduce their own approaches to formative assessment, to support pupil attainment and progression.

#### 14- to 19-year-olds

There are a number of ongoing developments relating to provision for 14- to 19-year-olds. These include reform of the General Certificate of Secondary Education (GCSE) examination; restructuring provision and increasing the age of participation for those aged 16+; and the ongoing reforms of vocational education for 14- to 19-year-olds following the influential Wolf Report (Wolf, 2011).

#### General Certificate of Secondary Education (GCSE)

Following concerns raised about standards in the White Paper The Importance of Teaching (DfE, 2010), the General Certificate of Secondary Education (GCSE) is undergoing a number of fundamental changes. GCSEs are single subject qualifications which students prepare for during key stage 4 (from age 14) and complete at age 16 (the end of full-time compulsory education. From September 2012 GCSEs have moved to a linear assessment model (all examinations are taken at the end of the course, ending the possibility of re-sitting individual modules). From January 2013 spelling, punctuation and grammar are taken account of in the marking of examination papers requiring extended answers in certain subjects and some individual subjects have been tightened up to ensure students cover the whole curriculum. From June to August 2013, a consultation was held on reforming subject content and assessment objectives for certain key subjects to make them more challenging and rigorous. The subjects are: English language, English literature, mathematics, biology, chemistry, physics, combined science double award, geography and history. Revised specifications for English language, English literature and mathematics are expected to be ready for first teaching in September 2015, with the first exams being taken in summer 2017 whilst revised GCSEs in science, history and geography are anticipated for first teaching in September 2016, with first exams in 2018. Ofqual (the Office of Qualifications and Examinations Regulations) is also reviewing the regulatory framework for GCSEs, consulting on the approach to assessing and reporting achievement including how coursework and controlled assessment could be largely replaced by linear, externally marked end-of-course exams.

16 to 19 participation and study programmes The Government has raised the participation age in England to 17 in 2013 and it will rise again to 18 in 2015. All 16- and 17-year-olds are now expected to participate in education or training. This can be full-time at school, college or with a training provider; part-time education and training combined with full time work or volunteering; or through an Apprenticeship.

In September 2013, following the recommendations of the Wolf Report (Wolf, 2011), '16–19 Study Programmes' have been introduced. These are based on the principle that all 16- to 19-year-olds in full-time state-funded provision, including those on



academic or vocational education programmes, should have the opportunity to study coherent, well-thought-out programmes which offer them breadth and depth, are rigorously assessed and do not limit their options for future study or work. Changes to funding, monitoring and reporting arrangements in 16–19 education are supporting the implementation of the Study Programmes. From September 2013:

- All students who are able should take either A levels, or a substantial qualification recognised by employers as being of real benefit to them in securing work or a university place. Where appropriate, students will also take part in work experience.
- Students who don't have a General Certificate of Secondary Education (GCSE) in English and mathematics at Grade C or above at 16 will continue to study these subjects after 16.
- Students who aren't able to study for a qualification will take a programme of work experience, . This will focus on developing their employability skills, along with work to develop numeracy, literacy and other core education skills.

Vocational qualifications for 14- to 19-year-olds are being reformed to ensure that young people follow substantial courses which are rigorously assessed and offer good progression opportunities. Changes have already taken place to the vocational qualifications available at level 2 (equivalent to GCSEs in the National Qualifications Framework). In addition, in July 2013, the Government announced that the only vocational qualifications at level 3 (the same level as GCE A levels in the National Qualifications Framework), which can be reported in school and college performance tables, will be 'Tech levels'. These are vocational qualifications which have the support of a professional body, or of five employers that represent the sector involved, and are at least the size of an A level. A new bursary scheme for 16- to 19-year-olds – the 16–19 Bursary Fund – was introduced in September 2012. This is made up of two parts: a guaranteed payment to a small group of the most vulnerable, and a discretionary fund for schools and colleges to distribute. The DfE website contains further information. The bursary scheme replaces the former Education Maintenance Allowance (EMA).

## Teacher Reforms

Raising the quality of teachers is a priority in England as set out in the 2011 strategy Training our Next Generation of Outstanding Teachers (DfE, 2011). As part of this drive, for teacher training courses starting from September 2013, prospective teachers are expected to sit rigorous English and mathematics tests before being accepted onto courses of initial teacher training. Other measures to raise the standard of teachers entering the profession include enhanced financial incentives for applicants with first class degrees in physics, chemistry, mathematics and modern foreign languages. From 2013/14 teachers' salaries in maintained schools in England will be more closely linked to performance. Schools will also have greater flexibility over how they pay their teachers to enable them to reward their best teachers or to respond to recruitment and retention issues. Academies (publicly funded independent schools – see the subheading 'Academies and Free Schools' above)

already enjoy flexibility relating to teachers' pay. Further information is available from the Department for Education. New standards for teachers came into effect in September 2012, following a review of existing measures of teacher performance and conduct, including the professional standards for teachers. A new single set of standards has replaced those required to achieve Qualified Teacher Status (QTS) and to pass induction (the Core Standards). The new standards incorporate standards for behaviour and conduct, and have replaced the former Code of Conduct and Practice for Registered Teachers. The review website is [www.dfe.gov.uk/standards](#). The aims of these reforms are to:

- introduce simpler performance management regulations which set a few basic requirements, remove many and leave other decisions to schools
- introduce an optional new 'model policy' for schools that deals with both performance and capability/disciplinary issues
- allow poorly performing teachers to be removed in about a term, a process that previously took a year or more
- clarify that staff illness need not bring disciplinary processes to a halt.